

SAMPLE CONTENT



Absolute

For all Medical Entrance Examinations held across India.

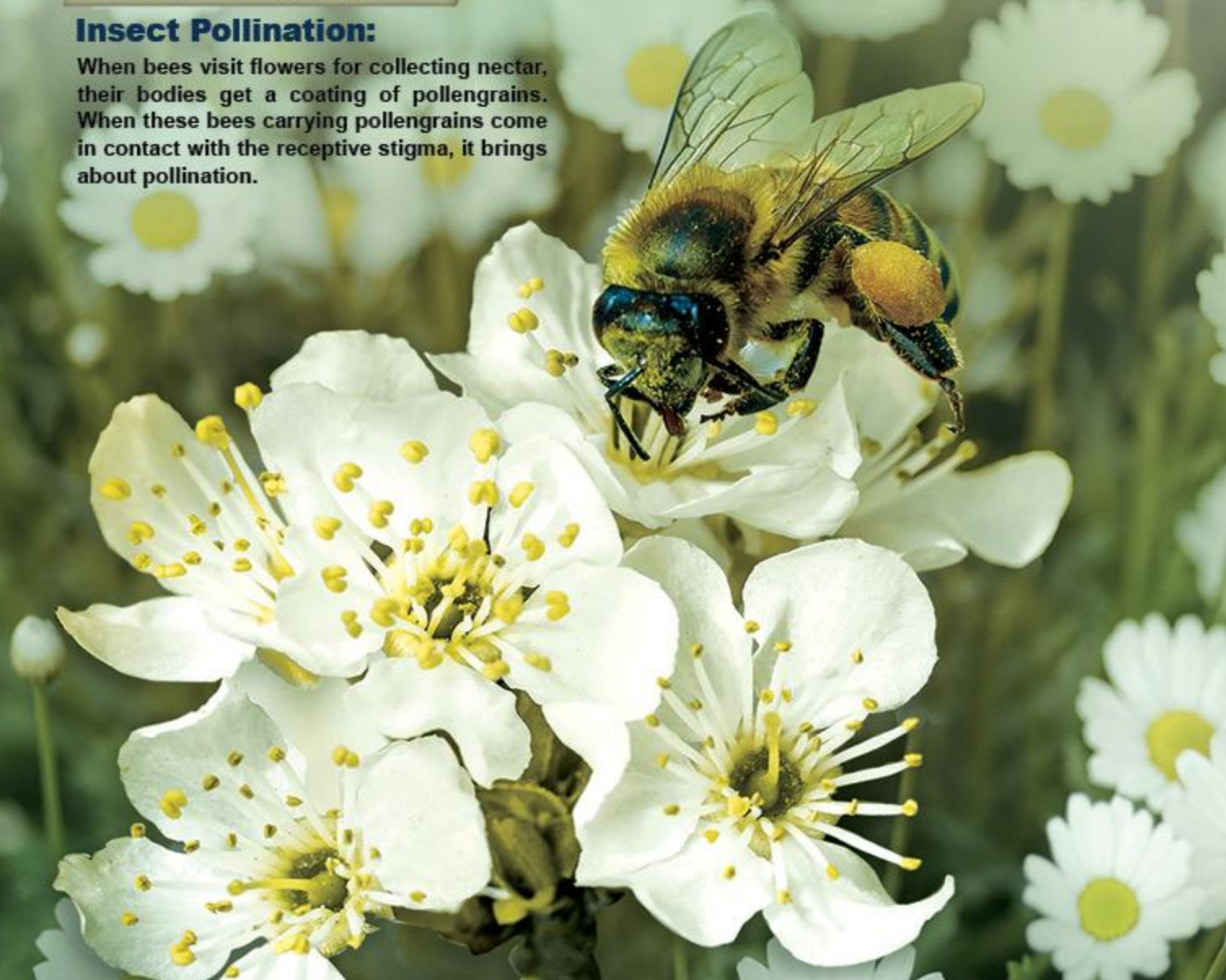
Biology Vol - II

NEET-UG

3295 MCQs with Hints

Insect Pollination:

When bees visit flowers for collecting nectar, their bodies get a coating of pollengrains. When these bees carrying pollengrains come in contact with the receptive stigma, it brings about pollination.



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Absolute NEET – UG Biology Vol. II

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Scan the adjacent Q.R. Code or visit www.targetpublications.org/tp13651 to access solutions/hints to Topic Test.



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PREFACE

Target's "Absolute Biology Vol – II" is compiled according to the notified syllabus for NEET-UG. The content of this book is framed after reviewing the format of NCERT textbook.

The sections of **Theory**, **Quick Review**, **MCQs** and **Topic Test** form the backbone of every chapter and ensure adequate revision.

The MCQs in each chapter are a mix of questions based on high order thinking, theory and multiple concepts. The level of difficulty of these questions is at par with that of various competitive examinations like CBSE, AIIMS, CPMT, AFMC, JIPMER, TS EAMCET (Med. and Engg.), BCECE, AP EAMCET (Med. and Engg.) and likes. Also to keep students updated, questions from most recent examinations such as AIPMT/NEET, MHT CET, KCET, GUJ CET, WB JEEM of years 2015, 2016, 2017 and 2018 are covered exclusively.

NEET-UG 2019 and NEET 2019 (Odisha) Question Paper and Answer Key has been provided. Students can access the hints of this Question Paper given in the form of QR Code.

Topic Test has been provided at the end of each chapter to assess the level of preparation of the student on a competitive level.

We are confident that this book will cater to needs of students across a varied background and effectively assist them to achieve their goal. We welcome readers' comments and suggestions which will enable us to refine and enrich this book further.

Please write to us at: mail@targetpublications.org

All the best to all Aspirants!

Yours faithfully,
Authors

Edition: Second

Disclaimer

This reference book is based on the NEET-UG syllabus prescribed by Central Board of Secondary Education (CBSE). We the publishers are making this reference book which constitutes as fair use of textual contents which are transformed by adding and elaborating, with a view to simplify the same to enable the students to understand, memorize and reproduce the same in examinations.

This work is purely inspired upon the course work as prescribed by the National Council of Educational Research and Training (NCERT). Every care has been taken in the publication of this reference book by the Authors while creating the contents. The Authors and the Publishers shall not be responsible for any loss or damages caused to any person on account of errors or omissions which might have crept in or disagreement of any third party on the point of view expressed in the reference book.

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04 Reproductive Health

- | | |
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| 4.0 Introduction | 4.4 Amniocentesis |
| 4.1 Reproductive Health – Problems and Strategies | 4.5 Sexually Transmitted Diseases (STDs) |
| 4.2 Population Explosion and Birth Control | 4.6 Infertility and Assisted Reproductive Technologies |
| 4.3 Medical Termination of Pregnancy (MTP) | |

4.0 Introduction

‘Reproductive health’ includes structure and healthy functioning of reproductive organs of humans as well as emotional and behavioural aspects.

According to WHO, reproductive health is defined as a total well being in all aspects of reproduction, i.e. physical, emotional, behavioural and social.

A reproductively healthy person is the one having physically and functionally normal reproductive organs and normal behavioural and emotional interactions with other persons in all sex related aspects.

4.1 Reproductive Health – Problems and Strategies

Ignorance of reproductive health may lead to many problems such as population explosion, ill health, etc. Population explosion has occurred in last 50 years. Government of India has initiated Family planning programme in 1951.

➤ **Problems related with reproductive health:**

- i. Lack of awareness in the people.
- ii. Myths and misconceptions regarding sex-related aspects.
- iii. Common occurrence of sexually-transmitted diseases.
- iv. Illegal female foeticide.
- v. Congenital or acquired infertility
- vi. Population explosion.

➤ **Objectives of reproductive health programmes:**

- i. To create awareness about reproductive health among the people.
- ii. To provide sex education in the schools and to make aware about myths and misconceptions about the sex related issues.
- iii. To prevent and control sexually transmitted diseases by providing proper information about reproductive organs, adolescence and safe and hygienic sexual practices.
- iv. To provide awareness about ill-effects of population explosion, sexual abuses, sexual discrimination and sex – related crimes.
- v. To maintain reproductive health of the society, various programmes are in operation such as:
 - a. Family planning programme
 - b. Reproductive and child health care (RCH) programme.

➤ **Strategies to maintain a reproductively healthy society:**

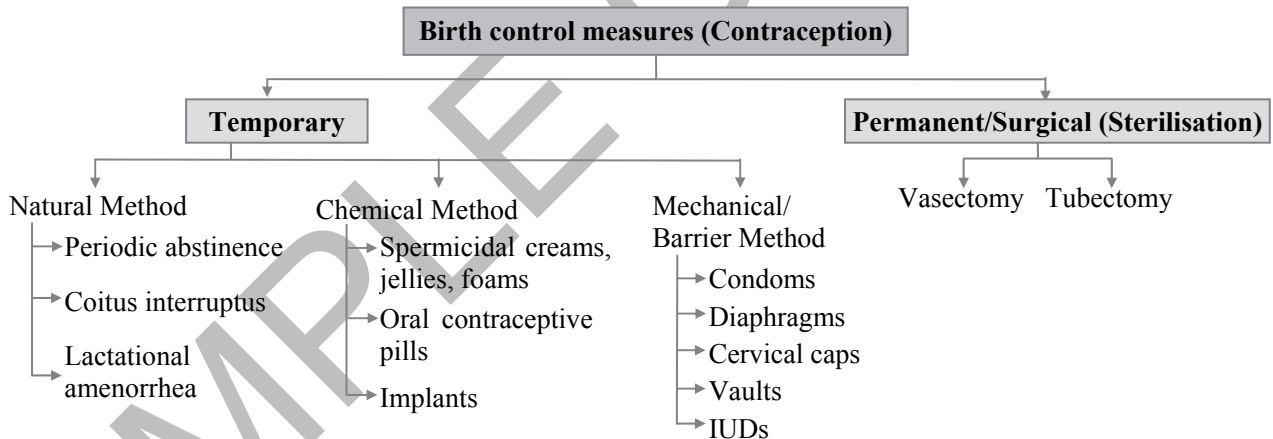
- i. Ban on amniocentesis, (a foetal sex determination test) to check female foeticide.
- ii. Fertile couples and marriageable age-groups should be educated about birth control measures.
- iii. Establishment of Health centres to diagnose infertility disorders.



4.2 Population Explosion and Birth Control

- **Reasons:**
 - i. All- round development in various fields.
 - ii. Improvement in the quality of life of the people.
 - iii. Increased health facilities.
 - iv. Better living conditions.
 - v. Rapid decline in:
 - Death rate
 - Maternal mortality rate (MMR)
 - Infant mortality rate (IMR)
 - Increase in the number of people in reproducible age
- **Effects:**

Scarcity of basic requirement such as food, clothing and shelter.
- **Prevention and control:**
 - i. **Awareness:** Using advertisements in media as well as posters/ bills, etc.
 - ii. Adoption of ‘one child norm’, by many couples.
 - iii. Statutory increase of marriageable age – Females (18 years), males (21 years)
 - iv. Incentives given to couples with small families.
 - v. Use of contraceptives (birth control methods).
- **An ideal contraceptive should:**
 - i. be user – friendly
 - ii. be easily available
 - iii. be effective
 - iv. be reversible with no/least side- effects.
 - v. not interfere with sexual drive/sexual act.



- **Birth control measure:** It includes
 - i. **Temporary method**
 - a. **Natural method (Works on the principle of avoiding chances of meeting of sperm and ovum)**
 1. **Periodic Abstinence:** To remain away from sexual activity, during 10th to 17th day of menstrual cycle. Ovulation generally occurs on 14th day of the menstrual cycle (range is 13th –16th day of the cycle).
Fertile period: Day 10 - Day 17 of menstrual cycle.
Chances of fertilization are high during this period.
Conception could be prevented by abstinence during this period.
 2. **Coitus interruptus (withdrawal):** It involves withdrawal of the penis by the male before ejaculation so that semen is not deposited in the vagina and there is no fertilization.
 3. **Lactational amenorrhoea:** Mother does not undergo menstruation immediately after parturition and during lactation period. Hence, chances of conception are nearly nil. It is effective upto 6 months after parturition.
For natural methods of birth control:
 - i. Side-effects are almost nil.
 - ii. Chances of failure are high.

**b. Chemical method:**

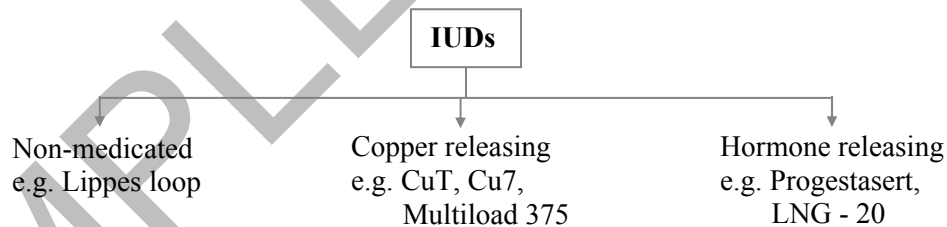
1. **Spermicidal:** Foam tablets, jellies and creams, if introduced into the vagina before sexual intercourse, adhere to the mucous membrane and immobilize and kill the sperms.
2. **Physiological (oral) devices:** Birth control pills (oral contraceptive pills) check ovulation by inhibiting the secretion of follicle stimulating hormone (FSH) and luteinizing hormone (LH) that are necessary for ovulation. These pills contain progesterone, estrogen which inhibit FSH and LH. Hence, no eggs are released in a woman on taking the pill and conception cannot occur. e.g. Saheli (weekly) – non-steroidal preparation. These contraceptive pills are very effective with lesser side effects and are widely accepted by the females.
3. **Implants:** These contain either progesterone or combination of progesterone-estrogen. These are placed under the skin and act like oral pills.

**Implants****c. Mechanical method:**

1. **Condoms:** It is a thin rubber/ latex sheath to cover the erect penis before coitus so that the ejaculated semen would not enter into the female reproductive tract. It is widely used by men in India. It is cheap and easily available. It also prevents spread of STDs and AIDS. Example: Nirodh
Condoms for females that are used to cover the vagina and cervix are also available.

**Condom for male****Condom for female**

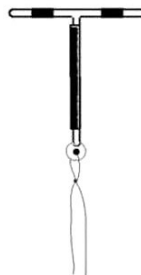
2. **Diaphragm, cervical cap and vaults:** These are made up of rubber and are inserted into the female reproductive tract to cover the cervix during coitus. They block the entry of sperms through cervix thereby preventing conception. They are reusable.
3. **Intrauterine device (IUD):** These are plastic or metal objects placed in the uterus by a doctor. They prevent the fertilization of the egg or implantation of the embryo.



IUDs increase phagocytosis of sperms within the uterus and the Cu ions released suppress sperm motility and their fertilization capacity. Hormone releasing IUDs makes uterus unsuitable for implantation and cervix hostile to sperms.

IUDs:

- i. They are ideal contraceptives for females who want to delay pregnancy/space children.
- ii. It is one of the most widely accepted methods of contraception in India.

**Copper T (CuT)**



ii. Permanent / Surgical / Sterilisation method:

These methods involve complete sterilization of male /female partner. Blocks gamete transport, thereby preventing conception. It includes:

- a. **Vasectomy:** By removing small part of vas deferens or tying it up through a small incision on the scrotum.
- b. **Tubectomy:** By removing small part of the fallopian tube or tying it up through a small incision in the abdomen or through vagina.

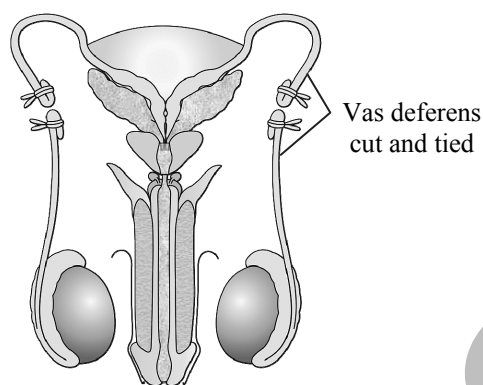
These techniques are highly effective but their reversibility is highly poor.

While selecting a suitable contraceptive method, its use should always be undertaken in consultation with qualified medical professionals.

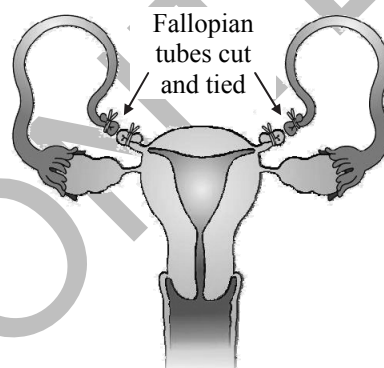
Contraceptives are not regular requirements for maintenance of reproductive health. They are practiced against a natural reproductive event.

Sometimes it becomes necessary to use these methods either to prevent pregnancy or to delay or space pregnancy due to personal reasons.

These methods have a significant role in checking uncontrolled growth of population.



**Vasectomy
(In Males)**



**Tubectomy
(In Females)**

Some possible ill-effects of using contraceptive methods:

- Nausea
- Breast cancer
- Irregular menstrual bleeding
- Abdominal pain
- Breakthrough bleeding

4.3 Medical Termination of Pregnancy (MTP)

It is the termination of pregnancy before the foetus becomes viable. It is also called induced abortion.

The safest period for MTP is first trimester, i.e. upto 12 weeks of pregnancy. It is risky to do MTP after first trimester because foetus becomes increasingly associated with maternal tissues.

MTPs performed in a year accounts to 1/5th of the total number of conceived pregnancies in a year.

It is yet debatable in many countries whether to accept/legalise MTP due to emotional, ethical, religious and social issues involved in it.

MTPs are legalised by government of India in 1971 with some restrictions to avoid its misuse.

Such strict conditions are important to check indiscriminate and illegal female foeticides which are reported to be high in India.

➤ **Merits:**

- i. MTP is useful in some cases where continuation of pregnancy may be harmful or fatal to either mother or foetus (or both).
- ii. This is mostly done to get rid of unwanted pregnancy due to casual unprotected intercourse or failure of contraceptive during coitus or rapes.

➤ **Demerits:**

- i. It being misused to abort female foetus.
- ii. MTPs must be carried out by qualified doctors, disturbing fact is that most of the MTPs are performed by quacks which is illegal.



4.4 Amniocentesis

- i. Amniocentesis is a technique to determine
 - a. sex of the developing foetus
 - b. metabolic and congenital diseases in foetus.
- ii. It is a prenatal diagnostic technique.
- iii. It is carried out in the following way:
 - a. Location of foetus is determined by sonography, thus prevents accidental damage of foetus.
 - b. Fine hollow needle is passed through uterine wall of pregnant woman (14th to 15th week of conception) into the amniotic cavity.
 - c. Small amount of amniotic fluid is withdrawn which contains foetal skin cells and enzymes. These cells are cultured for examination (*in vitro*).

Importance

i. Sex determination:

Somatic cells of foetal skin from amniotic fluid are stained to determine the presence of sex chromatin (Barr body). Presence of Barr body indicates that the foetus is female, as female has two X chromosomes out of which one X chromosome is active and other is heterochromatised into darkly stained Barr body.

ii. Determination of congenital and metabolic disorders:

Karyotypic studies of somatic cells are done to determine abnormalities due to change in chromosome number. e.g. Down's syndrome, Turner's syndrome, etc. By enzyme analysis, metabolic disorders like phenylketonuria, alkaptonuria, etc. can be detected.

Drawbacks of Amniocentesis:

Amniocentesis is being misused to determine the sex of child. If the child is female, then she is aborted.

4.5 Sexually Transmitted Diseases (STDs)

Sexually Transmitted Diseases (STDs) – They are transmitted through sexual intercourse.

Also known as Venereal diseases (VD) or Reproductive tract infections (RTI).

E.g. Gonorrhoea, syphilis, genital herpes, chlamydia, genital warts, trichomoniasis, hepatitis-B, HIV (AIDS).

➤ Mode of Transmission:

- i. Sharing of needles, surgical instruments, etc. with infected persons.
- ii. Blood transfusion.
- iii. Infected mother to foetus.

➤ Symptoms:

- | | |
|------------------|---------------------------------|
| i. Itching | ii. Fluid discharge |
| iii. Slight pain | iv. Swelling in genital region. |

➤ Some complications if STDs are not detected in time and given proper treatment:

- | | |
|---------------------------------------|----------------------------------|
| i. Pelvic inflammatory diseases (PID) | ii. Still births |
| iii. Abortions | iv. Ectopic pregnancies |
| v. Infertility | vi. Cancer of reproductive tract |

STDs are major threat to healthy society. Thus, prevention or early detection and cure of these diseases are given prime consideration under the reproductive health-care programs.

People belonging to age group 15 – 24 years are highly vulnerable to STDs.

One should not panic because prevention is possible.

With the exception of Hepatitis-B, genital herpes and HIV infections, all other diseases are completely curable if detected early and treated properly.

➤ Prevention:

- i. Avoid sex with unknown/multiple partners.
- ii. Use of condoms during sexual intercourse (coitus).
- iii. Visiting a qualified doctor, in case of any doubt and get complete treatment if diagnosed with disease.



4.6 Infertility and Assisted Reproductive Technologies

➤ Infertility

Definition: Inability to conceive or produce offsprings even after unprotected sexual co-habitation.

Females are often blamed in India, for the couple being childless but more often than not, problem lies in male partner. Infertility clinics could help in diagnosis and corrective treatment of some of these disorders and enable these couples to have children. The couples could also be assisted to have children through techniques known as Assisted Reproductive Technologies (ARTs), whenever the corrective treatments are not possible.

Causes: It is caused due to physical, immunological, congenital, psychological disorders and drugs.

➤ Treatment:

Assisted reproductive technologies (ARTs) are the techniques used for treating infertility.

Various techniques used are:

- | | |
|--------------------------|--------------------|
| i. IVF or test tube baby | ii. GIFT |
| iii. AI technique | iv. ICSI technique |

i. IVF (*in vitro* fertilization) or Test tube baby:

Definition: The technique of *in vitro* fertilization (IVF) and *in vitro* development followed by embryo transfer (ET) in the uterus of a normal female to start the development and finally leading to normal birth is called test tube baby. When a woman is unable to have a normal conception, this method is used.

Procedure:

- Removal of unfertilized ovum from female reproductive tract.
- Ovum kept under aseptic conditions.
- Fusion of sperm and ovum *in vitro*, i.e. in a culture medium outside the female's body, to form a zygote.
- Zygote develops *in vitro* up to 32 - celled stage.
- Developing embryo is implanted into the endometrium of uterus, thus starting the pregnancy of the female and further development of the foetus till the birth takes place in mother's womb.
- Such a baby is called test tube baby.

Depending upon the stage of embryo transfer and site of transfer, IVF is of two types:

- ZIFT (Zygote intra-fallopian Transfer):** In this, embryo or zygote upto 8 blastomeres is transferred into fallopian tube of the female.
- IUT (Intra-Uterine Transfer):** In this, embryo or zygote more than 8 blastomeres (32 - celled stage) is transferred in uterus of the female.

ii. GIFT (Gamete Intra-fallopian transfer):

- GIFT is called gamete intra-fallopian transfer.
- In this method, ovum collected from a donor is transferred into the fallopian tube of another female who cannot produce ovum but can provide suitable environment for fertilization and further development.

iii. Artificial Insemination (AI):

- This technique is used in cases where the male partner is unable to inseminate the female or has very low sperm count in ejaculation.
- In this technique, semen collected from the husband or healthy donor is introduced artificially either into the vagina or into the uterus (IUI – Intra-uterine insemination) of the female.

iv. Intra Cytoplasmic Sperm Injection (ICSI):

In this procedure, sperm is directly injected into the ovum to form an embryo in the laboratory.

➤ Drawbacks of Assisted reproductive technologies (ARTs):

- All these ART's require expensive instruments and highly qualified professionals to handle the instruments and carry out the process. At present, only few centres in the country are available with these facilities.
- Only few people can afford it.
- It has raised few ethical issues, legal problems, religious and moral issues.

Legal adoption of orphaned and destitute child is also an option for childless couple.



Quick Review

Sexually Transmitted Diseases (STDs)

- ◆ These are the diseases transmitted through sexual intercourse with infected persons.
- ◆ Also called Venereal diseases (VD) or Reproductive Tract Infections (RTI).
- ◆ eg. Syphilis, Gonorrhoea, HIV, etc.

Medical Termination of Pregnancy (MTP)

- ◆ It is the termination of pregnancy before foetus becomes viable.
- ◆ It is used to get rid of unwanted pregnancies due to casual unprotected intercourse or if the continuation of pregnancy would be harmful or fatal to the mother or foetus or both.

Amniocentesis

- ◆ Technique of withdrawing amniotic fluid from pregnant mother's uterus.
- ◆ Helps in checking chromosomal defects in foetus.

REPRODUCTIVE HEALTH

Need for Reproductive Health

- ◆ To eradicate myths and misconceptions about sex related aspects from the minds of people.
- ◆ To prevent STDs.
- ◆ To give proper information about safe and hygienic sexual practices.
- ◆ Birth control.
- ◆ Pre-natal care of mother and child.
- ◆ Make people aware about the problems of population explosion, sex abuses and sex-related crimes.

Birth Control Methods

Temporary:

- ◆ Safe Period (Rhythm Method)
- ◆ Coitus interruptus
- ◆ Spermicides → Males
- ◆ Condoms → Males and females
- ◆ Diaphragm, cervical cap and vaults → Females
- ◆ Intrauterine contraceptive device (IUD) → Females
- ◆ Birth control pills → Females
- ◆ Skin implants → Females

Permanent:

- ◆ Vasectomy → Males
- ◆ Tubectomy → Females

In-vitro Fertilization (IVF)

- ◆ Also called Test tube baby programme.
- ◆ Fusion of gametes take place outside the female body in laboratory conditions.
- ◆ Zygote is developed till morula stage and embryo is introduced in the uterus where it develops into a baby.

Techniques

Zygote Intra-fallopian Tube Transfer (ZIFT)

- ◆ Zygote or early embryo upto 8 blastomeres is transferred into fallopian tube.
- ◆ Embryo moves to the uterus, gets implanted and continues further development.

Gamete Intra-fallopian Transfer (GIFT)

- ◆ Transfer of an ovum collected from a donor into the fallopian tube of another female who cannot produce one, but provide suitable environment for fertilization and development.



Multiple Choice Questions

4.0 Introduction

- A reproductively healthy person is the one who
 - has physically and functionally normal reproductive organs
 - has normal behavioural and emotional interactions with other person in sex-related aspects
 - both (A) and (B)
 - none of these

4.1 Reproductive Health – Problems and Strategies

- A national level approach to build up a reproductively healthy society was taken up in our country in **[NCERT Exemplar]**
 - 1950s
 - 1960s
 - 1980s
 - 1990s
- In India the action plans for family planning were initiated in the year **[KCET 2017]**
 - 1972
 - 1947
 - 1951
 - 1950
- To maintain reproductive health of the society, it is essential to
 - provide sex education in schools
 - prevent and control sexually transmitted diseases by providing proper information about reproductive organs and safe and hygienic practices
 - develop various programmes such as – family planning programmes and RCH
 - all of the above
- _____ helps to maintain reproductive health of the society.
 - Family planning programme
 - Adult literacy campaign
 - Green revolution
 - White revolution
- The following factors indicate improved reproductive health of the society. Choose the correct option.
 - Better detection and cure of disease
 - Better post-natal care
 - Medically assisted deliveries
 - Increased MMR
 Select the code for the correct answer from the options given below. **[KCET 2018]**
 - ii, iii and iv only
 - i, ii and iii only
 - i, iii and iv only
 - i, ii and iv only

- _____ is responsible for declining female: male ratio.
 - Marriage
 - Female foeticide
 - Contraceptives
 - Coitus interruptus

4.2 Population Explosion and Birth Control

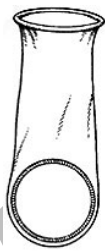
- Increased IMR and decreased MMR in a population will **[NCERT Exemplar]**
 - cause rapid increase in growth rate
 - result in decline in growth rate
 - not cause significant change in growth rate
 - Result in an explosive population/exp
- Increase in the minimum age of marriage of girls and boys
 - reduces the child-bearing period of a married couple
 - increases the child bearing period
 - first increases and then decreases the child bearing period
 - no effect
- Abstinence for birth control includes
 - use of condom
 - use of diaphragm
 - oophorectomy
 - avoiding sex
- Which period of menstrual cycle is called 'risky period of conception'?
 - 3rd to 7th day
 - 7th to 13th day
 - 10th to 17th day
 - 17th to 25th day
- The temporary method of birth control which involves withdrawal of the penis by the male before ejaculation is
 - rhythm method
 - coitus interruptus
 - spermicides
 - IUCD
- Lactational amenorrhoea means
 - menstruation ceases in the woman
 - woman does not undergo menstruation immediately after parturition and during lactation period
 - menstruation starts in the woman
 - all of the above
- Lactational amenorrhea **[KCET 2016]**
 - prevents secretion of prolactin
 - prevents secretion of milk from breast
 - prevents spermatogenesis
 - prevents conception
- Assertion (A):** Side effects in natural methods of contraception are almost nil.
Reason (R): No medicines or devices are used in natural methods of contraception.
 - Both assertion and reason are true and reason is the correct explanation of assertion.
 - Both assertion and reason are true but reason is not the correct explanation of assertion.
 - Assertion is true but reason is false.
 - Both assertion and reason are false.



16. Identify the contraceptive given below.



- (A) Cervical cap
(B) Copper T
(C) Condom for male
(D) Condom for female
17. Action of vaginal diaphragm is
(A) prevent the ova to come in the uterus
(B) prevent the sperm to come in contact with ova
(C) spermicidal
(D) anti-implantational
18. Condoms are one of the most popular contraceptives because of the following reasons: **[NCERT Exemplar]**
(A) These are effective barriers for insemination
(B) They do not interfere with coital act
(C) These help in reducing the risk of STDs
(D) All of the above
19. Complete the analogy and select the correct option.
Nirodh : Male :: _____ : Female
(A) Diaphragm (B) IUD
(C) Cervical cap (D) All of these
20. Two methods of contraception 'P' and 'Q' are given below. Identify them and choose the correct option.



(P)



(Q)

- (A) P – Condom for female, Q – Vault
(B) P – Diaphragm, Q – CuT
(C) P – Condom for female, Q – CuT
(D) P – Condom for male, Q – CuT
21. The cheap and convenient method of birth control is **[OJEE 2003]**
(A) Vasectomy (B) IUDs
(C) Condom (D) Pills
22. Diaphragms are contraceptive devices used by the females. Choose the correct option from the statements given below:
i. They are introduced into the uterus.
ii. They are placed to cover the cervical region.
iii. They act as physical barriers for sperm entry.

- iv. They act as spermicidal agents.

[NCERT Exemplar]

- (A) i and ii (B) i and iii
(C) ii and iii (D) iii and iv
23. Foam tablets and creams
(A) are spermicidal
(B) entangles the sperms
(C) prevents the release of ova
(D) enable the sperms to reach towards ovum rapidly
24. IUD controls the fertility by
(A) preventing implantation of the fertilized ovum in uterus
(B) obstructing sperm from reaching fallopian tubes
(C) both (A) and (B)
(D) none of these
25. _____ is an IUD
(A) Copper-T (B) Condom
(C) Vasectomy (D) Pill
26. The function of copper ions in copper releasing IUD's is: **[NEET (UG) 2017]**
(A) They suppress sperm motility and fertilising capacity of sperms.
(B) They inhibit gametogenesis.
(C) They make uterus unsuitable for implantation.
(D) They inhibit ovulation.
27. Intra-uterine devices (IUDs) are used to prevent **[CET Chd.2000]**
(A) sperms to reach ovum
(B) sperm to reach female
(C) sperm from leaving testes
(D) all of these
28. Which of the following is hormone releasing IUD? **[AIPMT 2014; NEET P-II 2016]**
(A) Cu7 (B) LNG – 20
(C) Multiload 375 (D) Lippes loop
29. Progestasert is an IUD which makes the uterus unsuitable and cervix hostile to the sperms as they are **[KCET 2015]**
(A) hormone releasing IUDs
(B) copper releasing IUDs
(C) ideal contraceptive
(D) non-medicated IUDs
30. IUDs which are used by females **[KCET 2014]**
(A) act as spermicidal jellies
(B) block the entry of sperms into vagina
(C) are implanted under the skin and they release progesterone and estrogen
(D) release copper ions in the uterus that increase phagocytosis of sperms



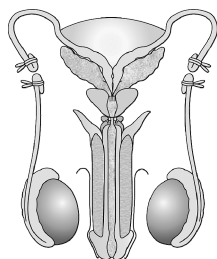
31. Identify the ODD one out.
 (A) CuT (B) Cu7
 (C) Multiload 375 (D) LNG -20
32. Common birth control methods are
[DUMET 2009]
 (A) Condom (B) Pills
 (C) Vasectomy (D) All of these
33. Which of the following is a method for birth control?
[KCET 2001]
 (A) IUD (B) GIFT
 (C) HTF (D) IVE-ET
34. Which one of the following is the most widely accepted method of contraception in India, as at present?
[AIPMT 2011]
 (A) IUDs (B) Cervical caps
 (C) Tubectomy (D) Diaphragms
35. Emergency contraceptives are effective if used within
[NCERT Exemplar]
 (A) 72 hrs of coitus
 (B) 72 hrs of ovulation
 (C) 72 hrs of menstruation
 (D) 72 hrs of implantation
36. Choose the right one among the statements given below:
[NCERT Exemplar]
 (A) IUDs are generally inserted by the user herself
 (B) IUDs increase phagocytosis reaction in the uterus
 (C) IUDs suppress gametogenesis
 (D) IUDs once inserted need not be replaced
37. In birth control method, which one of the following is an Intra Uterine Device?
[TS EAM CET 2015]
 (A) DMPA (B) LNG-20
 (C) Saheli (D) Vaginal ring
38. The contraceptive 'SAHELI'
[NEET (UG) 2018]
 (A) is an IUD.
 (B) increases the concentration of estrogen and prevents ovulation in females.
 (C) blocks estrogen receptors in the uterus, preventing eggs from getting implanted.
 (D) is a post-coital contraceptive.
39. Implants contain different combination of
 (A) estrogen and testosterone
 (B) estrogen and progesterone
 (C) progesterone and testosterone
 (D) estrogen and LH
40. The most important component of the oral contraceptive pills is
[CBSE PMT 1998]
 (A) progesterone
 (B) growth hormone
 (C) thyroxine
 (D) luteinizing hormone
41. The birth control pill contains _____.
[MHT CET 2017]
 (A) Progesterone and estrogen
 (B) LH and estrogen
 (C) FSH and LH
 (D) FSH and estrogen
42. An oral contraceptive pill checks
[MHT CET 2016]
 (A) fertilization (B) implantation
 (C) infection (D) ovulation
43. With reference to the contraceptive 'Saheli', identify the INCORRECT statement/s.
 i. It is an oral contraceptive pill.
 ii. It was developed by WHO in Lucknow.
 iii. It contains steroidal preparation.
 iv. It has numerous side-effects.
 (A) i, iii and iv (B) i and iv
 (C) ii, iii and iv (D) iii and iv
44. Removal of a segment surgically and ligation of cut ends of vas deferens is known as
 (A) tubectomy (B) vasectomy
 (C) gonadectomy (D) castration
45. The technique used to block the passage of sperm in male is _____
[MH CET 2014]
 (A) Tubectomy
 (B) Vasectomy
 (C) Coitus interruptus
 (D) Rhythm method
46. The permanent method of birth control in man is
[CMC Vellore 2005]
 (A) vasectomy (B) tubectomy
 (C) IUD (D) condom
47. Which of the following is INCORRECT regarding vasectomy?
[NEET P-II 2016]
 (A) Irreversible sterility
 (B) No sperm occurs in seminal fluid
 (C) No sperm occurs in epididymis
 (D) Vasa deferentia is cut and tied
48. The sterilization procedure in human female is
[MHT CET 2016]
 (A) Coitus interruptus
 (B) Rhythm method
 (C) Tubectomy
 (D) Vasectomy
49. Tubectomy is a method of sterilization in which
[AIPMT 2014]
 (A) small part of the fallopian tube is removed or tied up
 (B) ovaries are removed surgically
 (C) small part of vas deferens is removed or tied up
 (D) uterus is removed surgically



50. The purpose of tubectomy is to prevent
[CBSE 2012]

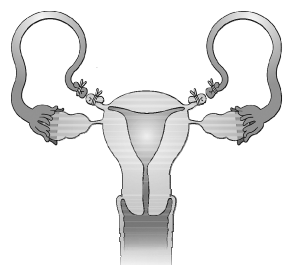
- (A) fertilization
(B) coitus
(C) formation of eggs
(D) embryonic development

51. What does the diagram given below represent?



- (A) Tubectomy in females
(B) Vasectomy in males
(C) Vasectomy in females
(D) Tubectomy in males

52. What is the figure given below showing in particular?



- (A) Ovarian cancer (B) Uterine cancer
(C) Tubectomy (D) Vasectomy

53. Which of the following approaches does not give the defined action of contraceptive?
[NEET P-I 2016]

(A)	Hormonal contraceptives	Prevent/retard entry of sperms, prevent ovulation and fertilization
(B)	Vasectomy	Prevents spermatogenesis
(C)	Barrier methods	Prevent fertilization
(D)	Intra uterine devices	Increase phagocytosis of sperms, suppress sperm motility and fertilizing capacity of sperms

54. Match the following column I with column II.

	Column I		Column II
i.	Surgical methods	a.	Condom
ii.	Barrier methods	b.	Pills
iii.	Natural methods	c.	Tubectomy
iv.	Chemical methods	d.	Lactational amenorrhea

Select the code for the correct answer from the options given below.
[KCET 2018]

- (A) i - c, ii - a, iii - d, iv - b
(B) i - c, ii - d, iii - a, iv - b
(C) i - d, ii - c, iii - b, iv - a
(D) i - b, ii - a, iii - c, iv - d

55. The correct surgical procedure as a contraceptive method is [NCERT Exemplar]

- (A) Ovariectomy (B) Hysterectomy
(C) Vasectomy (D) Castration

56. Sterilisation techniques are generally full proof methods of contraception with least side effects. Yet, this is the last option for the couples because:

- i. It is almost irreversible.
ii. Of the misconception that it will reduce sexual urge/drive.
iii. It is a surgical procedure
iv. Of lack of sufficient facilities in many parts of the country.

[NCERT Exemplar]

Choose the correct option:

- (A) i and iii (B) ii and iii
(C) ii and iv (D) i, ii, iii and iv

4.3 Medical Termination of Pregnancy (MTP)

57. Intentional or voluntary termination of pregnancy before full term is called

- (A) MTP (B) ZIFT
(C) GIFT (D) IUCD

58. Medical termination of pregnancy (MTP) is considered safe upto how many weeks of pregnancy?
[AIPMT 2011]

- (A) Six weeks
(B) Eight weeks
(C) Twelve weeks
(D) Eighteen weeks

59. Medical termination of pregnancy is permitted upto
[AIPMT 2010]

- (A) first trimester
(B) second trimester
(C) both (A) and (B)
(D) third trimester

60. Legally accepted term of 'abortion' is

- (A) MTP (B) MMTP
(C) MTTP (D) None of these

61. The Government of India legalised MTP in

- (A) 1981 (B) 1917
(C) 1991 (D) 1971

62. MTP is used

- (A) to discontinue the pregnancy in harmful cases
(B) to get rid of unwanted pregnancy
(C) to check any abnormalities in the developing foetus
(D) both (A) and (B)



63. Following statements are given regarding MTP. Choose the correct options given below:
- MTPs are generally advised during first trimester.
 - MTPs are used as a contraceptive method.
 - MTPs are always surgical.
 - MTPs require the assistance of qualified medical personnel.
- [NCERT Exemplar]**
- (A) ii and iii (B) ii and iii
(C) i and iv (D) i and ii

4.4 Amniocentesis

64. Amniocentesis is a process to **[CBSE PMT 1997]**
- determine any disease in heart
 - determine any hereditary disease in the embryo
 - know about the disease of brain
 - all of these
65. Amniocentesis is
- post natal diagnostic technique
 - pre natal diagnostic technique
 - check up of one pregnant woman for any deficiency
 - check up of pregnant woman for any reaction
66. Amniocentesis is the withdrawal of amniotic fluid in **[MP PMT 2000]**
- menopause (B) lactation
 - gestation (D) pregnancy
67. In amniocentesis, the fluid is taken from **[Kerala CET 2002]**
- foetal blood
 - mother's blood
 - body fluid of mother
 - fluid surrounding foetus
68. In amniocentesis, the following is examined **[BCECE 2015]**
- amino acids (B) membrane
 - skin cells (D) sex organs
69. Foetal sex can be determined by examining cells from the amniotic fluid by looking for **[CBSE PMT 1997]**
- Barr bodies (B) Autosomes
 - Chiasmata (D) Kinetochore
70. Through amniocentesis, foetal cells can be cultured and tested for detecting various diseases of foetus by **[MP PMT 2002]**
- Karyotype
 - Enzyme production
 - DNA analysis
 - All of them

71. Which of the following CANNOT be detected in a developing foetus by amniocentesis? **[NEET 2013]**
- Klinefelter's syndrome
 - Sex of the foetus
 - Down's syndrome
 - Jaundice
72. Amniocentesis is one of the methods **[KCET 2016]**
- for foetal sex determination
 - adapted for MTP
 - used for safe parturition
 - of birth control
73. In context of amniocentesis, which of the following statement is incorrect? **[NEET P-I 2016]**
- It can be used for detection of Down syndrome.
 - It can be used for detection of Cleft palate.
 - It is usually done when a woman is between 14 - 16 weeks pregnant.
 - It is used for prenatal sex determination.

4.5 Sexually Transmitted Diseases (STDs)

74. Sexually transmitted diseases are also called
- STDs
 - venereal diseases
 - reproductive tract infections
 - all of the above
75. Which of the following statements is/are incorrect about STDs?
- STDs are called silent infections.
 - STDs lead to changing pattern of sexual behaviour.
 - Abstinence results into STD infections.
 - Hepatitis-B is one of the STD.
76. Sexually transmitted diseases are **[UPCPMT 2002]**
- syphilis (B) gonorrhoea
 - both (A) and (B) (D) cholera
77. Incubation period of *Treponema pallidum* is about **[MHT CET 2016]**
- 2 to 14 days (B) 7 to 21 days
 - 1 to 2 weeks (D) 3 to 4 weeks
78. *Treponema pallidum* is a _____ bacterium. **[MHT CET 2017]**
- Streptococcus (B) Streptobacillus
 - Spirochaete (D) Oligochaete
79. One of the group include all sexually transmitted diseases **[AMU 2012]**
- AIDS, syphilis, cholera
 - HIV, malaria, trichosomoniasis
 - gonorrhoea, hepatitis-B, chlamydiasis
 - hepatitis-B, haemophilia, AIDS.



80. From the sexually transmitted diseases mentioned below, identify the one which does not specifically affect the sex organs
[NCERT Exemplar]
(A) Syphilis (B) AIDS
(C) Gonorrhoea (D) Genital warts
81. Which of the following is NOT a sexually transmitted disease?
[AIPMT 2015]
(A) Syphilis
(B) Acquired Immuno Deficiency Syndrome (AIDS)
(C) Trichomoniasis
(D) Encephalitis
82. Hepatitis B and AIDS can spread through
(A) blood transfusion
(B) sharing of injection needles
(C) infected mother to foetus
(D) all of the above
83. **Assertion (A):** Gonorrhoea is a reproductive tract infection.
Reason (R): It is transmitted through sexual intercourse.
(A) Both assertion and reason are true and reason is the correct explanation of assertion.
(B) Both assertion and reason are true but reason is not the correct explanation of assertion.
(C) Assertion is true but reason is false.
(D) Both assertion and reason are false.
84. Match the following sexually transmitted diseases (Column I) with their causative agent (Column II) and select the correct option.
- | Column I | | Column II | |
|----------|---------------|-----------|------------------------------|
| i. | Gonorrhoea | a. | HIV |
| ii. | Syphilis | b. | <i>Neisseria</i> |
| iii. | Genital Warts | c. | <i>Treponema</i> |
| iv. | AIDS | d. | <i>Human Papilloma Virus</i> |
- [NEET (UG) 2017]
- | | i. | ii. | iii. | iv. |
|-----|----|-----|------|-----|
| (A) | b | c | d | a |
| (B) | c | d | a | b |
| (C) | d | b | c | a |
| (D) | d | c | b | a |
85. The apparent failure of a couple to conceive is known as
[AFMC 2005]
(A) infertility
(B) sterility
(C) fertility
(D) none of the above
86. The fertilization takes place outside the body in
[RPMT 2001]
(A) IVF (B) GIFT
(C) ZIFT (D) All of these
87. *In vitro* fertilization is a technique that involves transfer of which one of the following into the fallopian tube?
[AIPMT 2010]
(A) Embryo only upto 8 cell stage
(B) Either zygote or early embryo upto 8 cell stage
(C) Embryo of 32 cell stage
(D) Zygote only
88. Which of the following statements is wrong?
[WB JEEM 2014]
(A) Test tube baby grows inside test tube
(B) Test tube baby grows within mother's womb
(C) Test tube baby grows within surrogate mother's womb
(D) Test tube baby grows following uterine fertilization
89. ZIFT stands for
(A) Zygote inter fallopian tube
(B) Zygote intra fallopian tube
(C) Zygote inter fallopian transfer
(D) Zygote intra fallopian transfer
90. The technique which involves embryo transfer in oviduct is called
(A) ZIFT (B) IUT
(C) GIFT (D) AI
91. Embryo with more than 16 blastomeres formed due to *in vitro* fertilization is transferred into
[NEET P-II 2016]
(A) cervix (B) uterus
(C) fallopian tube (D) fimbriae
92. Assisted reproductive technology, IVF involves transfer of
[AIPMT 2014]
(A) Ovum into the fallopian tube
(B) Zygote into the fallopian tube
(C) Zygote into the uterus
(D) Embryo with 16 blastomeres into the fallopian tube
93. Choose the correct statement regarding the ZIFT procedure:
[NCERT Exemplar]
(A) Ova collected from a female donor are transferred to the fallopian tube to facilitate zygote formation.
(B) Zygote is collected from a female donor and transferred to the fallopian tube.
(C) Zygote is collected from a female donor and transferred to the uterus.
(D) Ova collected from a female donor and transferred to the uterus.

4.6 Infertility



94. A childless couple can be assisted to have a child through a technique called GIFT. The full form of this technique is:

[AIPMT RETEST 2015]

- (A) Germ cell internal fallopian transfer
- (B) Gamete inseminated fallopian transfer
- (C) Gamete intra fallopian transfer
- (D) Gamete internal fertilization and transfer

95. Artificial reproductive techniques are not always applicable because

- (A) it is very expensive, hence only few people can afford it.
- (B) these facilities are available only in very few centres in India.
- (C) it has raised ethical, legal and moral issues.
- (D) all of these

96. Assisted Reproductive Technology does not include

[KCET 2015]

- (A) Zygote extra fallopian transfer
- (B) *In vitro* fertilization and embryo transfer
- (C) Artificial insemination
- (D) Gamete intra fallopian transfer

97. The method of directly injecting a sperm into ovum in assisted reproductive technology is called

[NCERT Exemplar]

- (A) GIFT
- (B) ZIFT
- (C) ICSI
- (D) ET

98. In case of a couple, where the male is having a very low sperm count, which technique will be suitable for fertilisation?

[MH CET 2014; NEET (UG) 2017]

- (A) Intrauterine transfer
- (B) Gamete intracytoplasmic fallopian transfer
- (C) Artificial Insemination
- (D) Intracytoplasmic sperm injection

99. Test tube baby means a baby born when

[CBSE PMT 2003]

- (A) it develops from a non-fertilized egg
- (B) it developed in a test tube
- (C) it is developed through tissue culture method
- (D) the ovum is fertilised externally and thereafter implanted in the uterus

100. Artificial insemination means

[NEET 2013]

- (A) artificial introduction of sperms of a healthy donor into the vagina
- (B) introduction of sperms of a healthy donor directly into the ovary

(C) transfer of sperms of a healthy donor to a test tube containing ova

(D) transfer of sperms of husband to a test containing ova.

101. In which technique, the donor semen is artificially introduced into the uterus?

[J & K CET 2014]

- (A) Intra vaginal insemination
- (B) Intra uterine insemination
- (C) Intra cytoplasmic insemination
- (D) Gamete intrafallopian transfer

Miscellaneous

102. The term 'sterilization' refers to

- (A) vaults
- (B) tubectomy
- (C) vasectomy
- (D) both (B) and (C)

103. Which of the following are clinical measures to check population explosion?

- (A) Encouraging use of condoms by male
- (B) Encouraging the use of IUD by females
- (C) Supplying contraceptive devices
- (D) All of these

104. Identify the INCORRECT pair.

- (A) Saheli – Implant
- (B) Genital warts – STD
- (C) Progestasert – IUD
- (D) Condom – Barrier

105. The best way to control population is

- (A) education
- (B) family planning
- (C) better living conditions
- (D) better health care

106. For controlling family, raising the marriageable age of couples basically means

- (A) making them wiser for life's responsibilities
- (B) reducing their fertility periods
- (C) making them grow older earlier
- (D) none of these

107. A contraceptive is

- (A) condom, cervical cap or diaphragm
- (B) intrauterine device
- (C) pill
- (D) all of these

108. Which of the following method of family planning is not practiced by males?

- (A) Surgical
- (B) Hormonal
- (C) Contraceptive
- (D) Abstinence

109. Fertilization of ovum may be prevented by

- (A) tubectomy
- (B) vasectomy
- (C) use of IUD
- (D) all of these



110. Given below are four methods (a - d) and their modes of action (i-iv) in achieving contraception. Select their correct matching pair from the four options that follow.

	Method		Mode of Action
a.	The pill	i.	Prevents sperms reaching cervix
b.	Condom	ii.	Prevents implantation
c.	Vasectomy	iii.	Prevents ovulation
d.	Copper T	iv.	Semen contains no sperms

[AIPMT 2008]

- (A) a – iii, b – iv, c – i, d – ii
 (B) a – ii, b – iii, c – i, d – iv
 (C) a – iii, b – i, c – iv, d – ii
 (D) a – iv, b – i, c – ii, d – iii

111. Consider the statements given below regarding contraception and answer as directed thereafter.

1. Medical Termination of Pregnancy (MTP) during first trimester is generally safe.
2. Generally chances of conception are nil until mother breast-feeds the infant upto two years.
3. Intra-uterine devices like copper-T are effective contraceptives.
4. Contraceptive pills may be taken upto one week after coitus to prevent conception.

Which two of the above statements are correct?

[CBSE 2008]

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

112. _____ are counterparts of condom in the female.

- (A) IUD
 (B) Condom
 (C) Diaphragm and cervical cap
 (D) Copper – T

113. Which one of the following is tested by the technique of amniocentesis? [MP PMT 1997]

- (A) Biochemical abnormalities in the foetus
 (B) Errors of metabolism in the foetus
 (C) Chromosomal abnormalities in the foetus
 (D) All of the above

114. The success of birth control programmes in controlling population growth is dependent on

[MP PMT 1994]

- (A) use of contraceptives
 (B) tubectomy
 (C) vasectomy
 (D) acceptability of the above by the people

115. To prevent the spread of STD's one should

- (A) avoid prostitution
 (B) avoid homosexuality
 (C) use condoms
 (D) all of the above

116. Copper – T loop prevents [CBSE 2000]

- (A) Ovulation (B) Zygote formation
 (C) Fertilization (D) Cleavage

117. In the production of test tube babies

[MP PMT 2000]

- (A) Fertilization is external but foetus formation is internal
 (B) Fertilization is internal but foetus formation is external
 (C) Fertilization and foetus formation are external
 (D) Fertilization and foetus formation are internal

118. Match the Column I and Column II and choose the correct option.

	Column I		Column II
i.	MTP	P.	Withdrawal
ii.	Tubectomy	Q.	Barrier
iii.	Vaults	R.	Induced abortion
iv.	Coitus interruptus	S.	Poor reversibility

- (A) i – R, ii – P, iii – Q, iv – S
 (B) i – R, ii – S, iii – P, iv – Q
 (C) i – P, ii – R, iii – Q, iv – S
 (D) i – R, ii – S, iii – Q, iv – P

119. Read the statements given below and fill in the blanks (P) and (Q) with the correct option.

- i. Pills have to be taken daily for a period of P days starting preferably within the first five days of menstrual cycle.
 ii. Q is a barrier method of contraception which is reusable.

- (A) P – 21, Q – Diaphragm
 (B) P – 21, Q – Condom
 (C) P – 27, Q – Vault
 (D) P – 12, Q – Diaphragm

120. **Assertion (A):** Sterilisation methods of contraception are ineffective.

Reason (R): Sterilisation prevents the spread of STDs and AIDS.

- (A) Both assertion and reason are true and reason is the correct explanation of assertion.
 (B) Both assertion and reason are true but reason is not the correct explanation of assertion.
 (C) Assertion is true but reason is false.
 (D) Both assertion and reason are false.

121. Which of the following technique is being misused in determination of sex of foetus?

- (A) IVF (B) Amniocentesis
 (C) ZIFT (D) IUT

122. Alkaptonuria (aa) is which type of error?

[GUJ CET 2017]

- (A) Lethal mutation
 (B) Metabolism error
 (C) Error in number of chromosome
 (D) Induced error



Answers to MCQs

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



Hints to MCQs

9. Raising the minimum age of marriage reduces the fertility period, thereby the chances of births become less.
23. When spermicidal tablets, foam, jellies are introduced into the vagina before sexual intercourse, it adheres to the mucus membrane and inactivates the sperm.
24. Hormone coated IUDs cause change in the uterine lining that blocks implantation of a fertilized ovum or some do not allow the sperms to travel into the fallopian tube to meet the egg. IUD stands for the term Intra Uterine Devices.
26. Cu ions released through copper releasing IUDs suppress sperm motility and the fertilising capacity of sperms.
28. LNG – 20 is a levonorgestrel releasing IUD.
30. Intrauterine devices release copper ion in the uterus that increases phagocytosis of sperms.
31. CuT, Cu7, Multiload 375 → Copper releasing IUDs
 LNG-20 → Hormone releasing IUD
33. IUD is a mechanical method of birth control which prevents the fertilization of the egg or implantation of the embryo.
38. The active ingredient of Saheli – Ormeloxifene is a selective estrogen receptor modulator. In some parts its action is estrogenic (e.g. bones) and in other parts of the body its action is anti-estrogenic (e.g. uterus)
39. Implants contain different combination of estrogen and progesterone which are placed under skin and act like oral pills.
49. Tubectomy is a method of female sterilization.

53. Vasectomy blocks the gamete transport and does not affect spermatogenesis.
65. The prenatal diagnosis of amniotic fluid to determine the genetic disorders is termed amniocentesis.
69. Barr bodies indicate that foetus is female.
70. Karyotypic studies of somatic cells are done to determine abnormalities in the foetus due to change in chromosome number. e.g. Down's syndrome.
71. Amniocentesis is a pre-natal diagnostic test in which amniotic fluid is withdrawn to know sex of foetus as well as chromosomal defect.
73. Cleft palate is a developmental abnormality and can be detected by sonography. Amniocentesis is a foetal sex determination test and is banned in India for sex determination to legally check increasing female foeticides.
75. Abstinence is restraining oneself from sexual intercourse, thus preventing STD infections.
84. Following are the sexually transmitted diseases and their causative agents:

Sexually transmitted diseases	Causative agent
Gonorrhoea	<i>Neisseria</i> (Bacteria)
Syphilis	<i>Treponema</i> (Bacteria)
Genital warts	<i>Human Papilloma Virus</i> (Virus)
AIDS	Human Immuno-deficiency Virus (Virus)


88. In test tube baby procedure, the fertilization is in vitro not in the uterus. But it grows upto 4-8 cell stage inside test tube.
90. ZIFT (Zygote intra-fallopian Transfer) involves transfer of zygote into fallopian tube. IUT is zygote transfer in uterus.



96. Zygote extra fallopian transfer.
ART includes:
- Zygote intra fallopian transfer
 - IVF and Embryo transfer
 - Artificial insemination
 - Gamete intra fallopian transfer
98. Artificial insemination (AI) technique is utilized when the male partner is unable to inseminate the female or has very low sperm count in ejaculate.
104. Saheli – Oral contraceptive pill.
106. With comparatively shorter fertility period, the chances for more births become less.
107. Condom, cervical cap, IUD and pills (combined pills and minipills) are the contraceptives.
108. Hormonal pills for use of females are available to prevent unwanted pregnancies. e.g. Saheli. Such hormonal pills are not available for males for family planning.
109. Tubectomy involves blocking of fallopian tubes. In vasectomy, the vas deferens is cut. IUCD include copper T and loops which are fitted in uterus and prevent fertilization of eggs.
121. Amniocentesis is used to determine whether the foetus is male or female. If female, then foetus is aborted.



Topic Test

1. According to the 2001 census report, the population growth rate was around _____ %.
(A) 17 (B) 7.1 (C) 1.7 (D) 2.7
2. _____ is a popular brand of condom for the male.
(A) Diaphragms (B) Vaults
(C) Cervical cap (D) Nirodh
3. Saheli is a _____ pill.
(A) once a day (B) once a week
(C) once a month (D) twice a week
4. The occurrences of STDs are reported to be very high among persons in the age group of _____ years.
(A) 15 – 24 (B) 10 – 15
(C) 5 – 10 (D) 25 – 35
5. Identify the odd one out.
(A) IVF (B) GIFT
(C) ET (D) IUD
6. Identify the INCORRECT match.
(A) IUI – Intra uterine insemination
(B) ET – Embryo transfer
(C) IVF – In vivo fertilization
(D) IUT – Intra uterine transfer
7. Identify the contraceptive method given below.
(A) Vault
(B) Implant
(C) Diaphragm
(D) Condom
- 
8. RCH refers to
(A) Reproductive and Child Healthcare
(B) Relative child Healthcare
(C) Reproductive Child Hygiene
(D) Reproductive Child Hormones
9. Saheli was developed by CDRI in
(A) Delhi (B) Bangalore
(C) Lucknow (D) Mumbai
10. Government of India has initiated Family planning programme in
(A) 1921 (B) 1951
(C) 1981 (D) 1971
11. **Assertion (A):** MTP is also called induced abortion.
Reason (R): MTP is considered relatively safe during the first trimester.
(A) Both assertion and reason are true and reason is the correct explanation of assertion.
(B) Both assertion and reason are true but reason is not the correct explanation of assertion.
(C) Assertion is true but reason is false.
(D) Both assertion and reason are false.
12. Match Columns I and II and choose the correct option.
- | | Column I | | Column II |
|------|---------------|----|-----------------------|
| i. | Lippes loop | P. | Copper releasing IUD |
| ii. | LNG – 20 | Q. | Non – medicated IUD |
| iii. | Multiload 375 | R. | Hormone releasing IUD |
| | | S. | Oral pill |
- (A) i – P, ii – S, iii – R
(B) i – Q, ii – S, iii – P
(C) i – Q, ii – P, iii – R
(D) i – Q, ii – R, iii – P
13. Identify the incorrect statement from the following.
(A) Hepatitis B is a STD.
(B) Lactational amenorrhoea is a natural method of contraception.
(C) IUDs can be self inserted.
(D) In tubectomy, fallopian tubes in females are cut and tied.



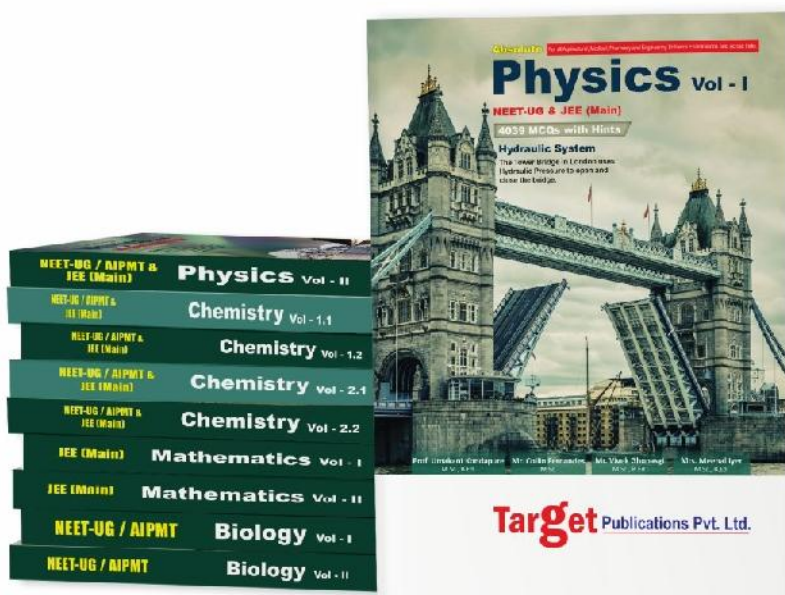
Answer to Topic Test

1. (C) 2. (D) 3. (B) 4. (A)
5. (D) 6. (C) 7. (B) 8. (A)
9. (C) 10. (B) 11. (B) 12. (D)
13. (C)



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