

CHAPTER 3

REPRODUCTIVE HEALTH

VEDA
ACADEMY

CLASS 12TH

NCERT EXERCISE AND SOLUTIONS - BIOLOGY



Q. 1 What do you think is the significance of reproductive health in a society?

ANSWER:-

- Reproductive health refers to the overall well-being in all aspects of reproduction, including emotional, physical, behavioural, and social dimensions.
- Certain diseases, such as gonorrhoea and AIDS, can spread through sexual contact and are classified as sexually transmitted diseases (STDs).
- Sexual activity can also result in unintended pregnancies and complications, especially if STDs are involved. Hence, raising awareness about reproductive health, particularly among the youth, is crucial as they are the future of the nation and are more vulnerable to STDs.
- Preventive measures include educating individuals about various birth control methods, STDs and their prevention, and the significance of gender equality.
- These initiatives can help foster a socially aware and healthy family structure. Additionally, addressing issues like unchecked population growth and persistent social evils can further contribute to building a reproductively healthy society.

Q. 2 Suggest the aspects of reproductive health which need to be given special attention in the present scenario.

ANSWER:-

Reproductive health encompasses emotional, physical, behavioural, and social well-being related to reproduction. Key focus areas include:

- Raising awareness about reproductive and child healthcare.
- Educating on reproductive organs, adolescence, safe sexual practices and STDs like AIDS.
- Introducing sex education in schools to disprove myths and misconceptions.
- Informing about birth control options, care during pregnancy, post-natal care and the importance of breastfeeding.
- Providing medical support, addressing population growth, promoting family planning, and combating social evils like sexual abuse and related crimes.

<https://t.me/veda11and12>



+91 98103 37915

1



Q. 3. Is sex education necessary in schools? Why?

ANSWER:-

Yes, sex education is essential in schools for the following reasons:

- It provides accurate information to dispel misconceptions and myths surrounding sex-related topics.
- It educates students about adolescence, reproductive organs, and related concepts.
- It raises awareness about the importance of hygienic and safe sexual practices and sexually transmitted diseases, helping adolescents maintain a healthy reproductive life.

Q. 4. Do you think that reproductive health in our country has improved in the past 50 years? If yes, mention some such areas of improvement.

ANSWER:-

Yes, reproductive health has seen significant improvements over the past 50 years, including the following areas:

- A reduction in infant mortality, thanks to widespread child immunization programs.
- A notable decrease in maternal and infant mortality rates due to improved post-natal care.
- Increased awareness through family planning programs, leading to smaller families.
- A decline in sexually transmitted diseases and unintended pregnancies due to the use of contraceptives.

Q. 5. What are the suggested reasons for population explosion?

ANSWER:-

Population explosion refers to a rapid and significant increase in population size. This growth occurs daily, driven primarily by two factors:

- Increased birth rates and longevity.
- Decreased death rates.

Over the past 50 years, the death rate has noticeably declined, a result of measures such as disease control, awareness campaigns on reproductive health, the introduction of sex education in schools, improved medical facilities, and better food and medical support during emergencies. These efforts have also contributed to greater longevity.

Q. 6. Is the use of contraceptives justified? Give reasons.

ANSWER:-

Yes, the use of contraceptives is entirely justified.

With the human population growing exponentially, regulating reproduction has become essential to control population growth. Contraceptive devices have been introduced to prevent unwanted pregnancies, leading to a decrease in the birth rate and helping manage the population explosion.



Q. 7. Removal of gonads cannot be considered as a contraceptive option. Why?

ANSWER:-

- Contraceptives are used to prevent unintended pregnancies and the transmission of sexually transmitted diseases.
- Alternatives to prevent unwanted pregnancies include oral, barrier, natural, and surgical methods. However, removing the gonads is not a viable contraceptive option, as it would result in infertility and disrupt the availability of hormones essential for the normal functioning of reproductive organs.
- Contraception aims to prevent fertilization without causing permanent infertility, which would occur with gonad removal.

Q. 8. Amniocentesis for sex determination is banned in our country. Is this ban necessary? Comment.

ANSWER:-

Amniocentesis is a prenatal diagnostic technique used to assess the sex and metabolic disorders of a developing foetus by analysing chromosomal patterns.

Initially, this method was intended to detect genetic disorders in the foetus. However, it has been misused for sex determination before birth, leading to female foeticide. To curb this practice, it is essential to ban the use of amniocentesis for sex determination.

Q. 9. Suggest some methods to assist infertile couples to have children.

ANSWER:-

Infertility is the inability of a couple to conceive despite unprotected sex, caused by various physical, psychological or immunological factors. Specialized healthcare units and infertility clinics can diagnose and treat some of these disorders. Assisted reproductive technologies (ART) help infertile couples have children.

Key ART methods include:

- **In Vitro Fertilization – Embryo Transfer (IVF-ET):** Eggs are fertilized outside the body, and the embryo is transferred back to the uterus.
 - **IUT (Intra-Uterine Transfer):** Embryo at the 8-cell stage is transferred to the fallopian tube.
 - **ZIFT (Zygote Intrafallopian Transfer):** Embryo at the 32-cell stage is transferred to the uterus.
- **In Vitro Fertilization – Surrogacy:** Embryo is created in a fertile female and transferred to an infertile woman.
- **Gamete Intrafallopian Transfer (GIFT):** Unfertilized eggs and sperm are transferred to the fallopian tube of a female who cannot produce eggs.
- **Intracytoplasmic Sperm Injection (ICSI):** Sperm is directly injected into the egg.
- **Artificial Insemination (AI):** Semen is introduced into the uterus or vagina.



Q. 10. What are the measures one has to take to prevent from contracting STDs?

ANSWER:-

Here are the measures to prevent the contraction of STDs:

- Avoid blood transfusions from infected individuals or drug abusers.
- Refrain from sharing surgical instruments and injection needles.
- Avoid sexual intercourse with unknown or multiple partners.
- Always use condoms during intercourse as a precaution.
- Seek prompt medical assistance from a qualified doctor for early detection and treatment if in doubt.

Q. 11. State True/False with explanation

- (a) Abortions could happen spontaneously too. (True/False)
- (b) Infertility is defined as the inability to produce a viable offspring and is always due to abnormalities/defects in the female partner. (True/False)
- (c) Complete lactation could help as a natural method of contraception. (True/False)
- (d) Creating awareness about sex related aspects is an effective method to improve reproductive health of the people. (True/False)

ANSWER:-

- (a) True
- (b) False

Infertility refers to the inability to produce viable offspring, which can result from abnormalities in either the male or female partner.

- (c) False

Lactational amenorrhea, or exclusive breastfeeding, can serve as a natural contraceptive method but is effective only up to six months after childbirth, during the lactational period.

- (d) True

Q. 12. Correct the following statements:

- (a) Surgical methods of contraception prevent gamete formation.
- (b) All sexually transmitted diseases are completely curable.
- (c) Oral pills are very popular contraceptives among the rural women.
- (d) In E.T. techniques, embryos are always transferred into the uterus.

ANSWER:-

- (a) Surgical contraception methods block the flow of gametes during intercourse.
- (b) Certain STDs can be effectively treated if detected early, but AIDS remains incurable.
- (c) Oral contraceptive pills are widely used among urban women.
- (d) In embryo transfer (E.T.) techniques, 8-celled embryos are transferred to the fallopian tube, while embryos with more than 8 cells are directly placed in the uterus.

