

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

Ans: Removal of gonads or its parts is a surgical method ,of sterilization. Vasectomy and tubectomy are carried out in males and females respectively. It will lead to infertility & both male and female will be dependent on hormones in their remaining life to regulate functioning of reproductive organs. These are very effective but their irreversibility is very poor, so they are not good options for contraception.

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

Ans: Since Amniocentesis is misused to find out the sex of the foetus leading to female foeticides, it is necessary. It is the prenatal diagnostic

technique, that helps to find out chromosomal (genetic) disorders, metabolic disorders of the foetus; in extreme cases where the foetus is found to be suffering from an incurable disorder Medical Termination of Pregnancy (MTP) is banned. The solution to the problem is not ' passing more laws, such as banning sex determination ultrasounds but raising the social & economic status of women.

9. Suggest some methods to assist infertile couples to have children. Ans: ART (Assisted Reproductive Technologies) is a term that describes several different methods used to help infertile couples. ART involves removing eggs from a woman's body, mixing them with sperm in the laboratory and putting the embryos bath into a woman's body.

Success rates vary depending on many factors. Something that affects the success rate of ART includes age of the partners, reason for infertility, type of ART, if the egg is fresh or frozen. Various methods are now available to help such couples are — in vitro fertilization, gamete intra fallopian transfer, intracytoplasmic sperm injection & artificial insemination.

- (i) In vitro fertilization Patient's egg & her partner's sperm are collected & mixed together in a laboratory to achieve fertilization outside the body. The embryo produced may then be transferred into the female patient. It is commonly known as test tube baby programme.
- (ii) Gamete Intra Fallopian Transfer (GIFT) A procedure in which eggs are retrieved from a woman, mixed with sperm & immediately replaced in one or other of the women's fallopian tubes so that they fertilize inside the body (invivo).
- (iii) Intra Cytoplasmic Sperm Injection (ICSI)- In this method, sperm & eggs are retrieved from both the parents. A single sperm is injected directly into an egg, then the fertilized egg is implanted into the woman's uterus.
- (iv) Artificial insemination In this technique, the semen is collected either from husband or a healthy donor & is artificially introduced either into the vagina or into the uterus of the female (IUI-Intra uterine insemination).
- 10. What are the measures one has to take to prevent from contracting STDs?

Ans:

- (i) Avoiding sex with unknown partner /multiple partners.
- (ii) Always use condoms during intercourse.
- (iii) In case of doubt, go for medical professional for early detection and get complete treatment if diagnosed with disease.
- (iv) Education & counselling of persons at risk on ways to adopt safer sexual behaviour.
- 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) Ans:
- (a) True. Due to internal factors like incompatibility, abortion could happen spontaneously.
- (b) False. It is due to abnormalities/defects in either male or female or both the partners.
- (c) True, but it is limited to period up to six months after parturition.
- (d) True. Creating awareness about sex-related aspects removes the myths and miconcep- tions about these problems.
- 12. Correct the following statements:
- (a) Surgical methods of contraception prevent gamete formation.
- (b) Ail 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.

Ans:

- (a) Surgical methods of contraception prevent gamete transport & thereby prevent conception.
- (b) Except for hepatitis-B, genital herpes and HIV infections, other STD diseases are completely curable if detected early and treated properly.
- (c) Oral pill are very popular contraceptives among the educated urban women.
- (d) In E.T. techniques, embryos with 8 blastomeres are transferred into fallopian tube and more than 8 blastomeres are transferred into the uterus.

