

# Reproductive Health

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## Assertion & Reason Type Questions

consists of two statements, one is Assertion (A) and the other is Reason (R). Select the correct answer to these questions from the codes a, b, c and d as given below.

- 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. Assertion is false but reason is true.

**Q 1. Assertion (A):** Sponge and delfin are chemical methods of contraception.

**Reason (R):** Diaphragms and cervical caps are disposable barrier method of contraception.

**Answer :** (c) Assertion is true but Reason is false. Diaphragms, cervical caps and vaults are made of rubber, inserted into the female reproductive tract to cover the cervix before coitus. They prevent fertilisation by blocking the entry of sperms through the cervix. These barriers are reusable.

**Q 2. Assertion (A):** Fetal chromosomal disorders can be diagnosed by chorionic villi sampling.

**Reason (R):** Karyotyping can be done for mitotically dividing cells of chorionic villi.

**Answer :** (a) Both Assertion and Reason are true and Reason is the correct explanation of Assertion. During early pregnancy, fetal chromosomal disorders can be diagnosed using chorionic villi sampling. In this technique the physician inserts a narrow, flexible tube through the mother's vagina and cervix into the uterus (guided by ultrasound) and withdraws a small amount of fetal tissue (chorionic villi) from the placenta. Because the cells of the chorionic villi are undergoing rapid mitosis, these cells can be used for karyotyping.

**Q 3. Assertion (A):** Generally, a woman does not conceive during the lactation period.

**Reason (R):** The hormone prolactin initiates and maintains lactation in a postpartum woman.

**Answer :** (b) Both Assertion and Reason are true but Reason is not the correct explanation of Assertion. Milk secretion is maintained as long as breast feeding, and hence hormone production continues. A woman does not conceive during the lactation period because lactation stimulates prolactin secretion and there is evidence that prolactin inhibits GnRH secretion, and antagonises the action of gonadotropins on the ovaries. Ovulation is inhibited, and the ovaries are inactive, so estrogen and progesterone output falls to low levels. Thus during lactation a woman does not conceive. Only 5-10% chances are there during lactation period. This can also be interpreted as mechanism devised by nature so that mother can look after the newborn child by providing it with milk.

**Q 4. Assertion (A):** PCR, ELISA, DNA hybridisation are confirmatory tests for sexually transmitted diseases.

**Reason (R):** Incidence of STDs is very high in persons above the age of 30.

**Answer :** (c) Assertion is true but Reason is false. STDs are a major threat to healthy society. Incidence of STDs is very high in persons who have 15-24 years of age.

**Q 5. Assertion (A):** Determining the sex of an unborn child followed by MTP is an illegal practice.

**Reason (R):** Amniocentesis is a practice to test the presence of genetic disorders also.

**Answer :** (b) Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.

**Q 6. Assertion (A):** Lactational amenorrhea is the natural method of contraception.

**Reason (R):** It increases the phagocytosis of sperm.

**Answer :** (c) Assertion is true but Reason is false. Lactational amenorrhea means absence of menstruation and is based on the fact that ovulation and therefore the cycle does not occur during the period of intense lactation. So, it is called as the natural method of contraception. But it does not increase the phagocytosis of sperms.

**Q 7. Assertion (A):** Saheli, an oral contraceptive for females, contains a steroidal preparation.

**Reason (R):** It is a "once a week" pill with very few side-effects.



**Answer :** (d) Assertion is false but Reason is true. Saheli is a new oral contraceptive for the females that contains a non-steroidal preparation. It is once a week pill with very few side effects and high contraceptive value.

**Q 8. Assertion (A):** Parturition is induced by a complex neuroendocrine mechanism.

**Reason (R):** At the end of gestation period, the maternal pituitary releases prolactin which causes uterine contractions.

**Answer :** (c) Assertion is true but Reason is false. The process of delivery of the foetus (childbirth) is called parturition. Parturition is induced by a complex neuroendocrine mechanism. The signals for parturition originate from the fully developed foetus and the placenta which induce mild uterine contractions called foetal ejection reflex. This triggers release of oxytocin from the maternal pituitary. Oxytocin acts on the uterine muscle and causes stringer uterine contractions, which in turn stimulates further secretion of oxytocin. The stimulatory reflex between the uterine contraction and oxytocin secretion continues resulting in stronger and stronger contractions. This leads to expulsion of the baby out of the uterus through the birth canal.

**Q 9. Assertion (A):** Very often persons suffering from Sexually Transmitted Diseases (STDs) do not go for timely detection and proper treatment.

**Reason (R):** Absence or less significant symptoms in the early stages of STDs and the social stigma attached to the disease.

**Answer :** (a) Both Assertion and Reason are true and Reason is the correct explanation of Assertion.

**Q 10. Assertion (A):** Vasectomy is a sterilisation procedure advised for females as a terminal method.

**Reason (R):** In vasectomy, a small part of the vas deferens is removed or tied by blocking gamete transport therefore preventing conception.

**Answer :** (d) Assertion is false but Reason is true.

**Q11. Assertion:** A person should be considered reproductively healthy if they have healthy reproductive organs but are emotionally imbalanced.

**Reason:** This statement about reproductive health was given by WHO.

**Q12. Assertion:** Family planning is an action plan to attain reproductive health among people.

**Reason:** Improved programmes covering reproduction related areas were propagated by RCH to create awareness among people.

**Q13. Assertion:** Reproductive and Child Healthcare Programmes is for reproduction related areas.

**Reason:** It deals with creating awareness among various reproduction related aspects.

**Q14. Assertion:** A wide range of contraceptive methods are available for family planning.

**Reason:** Natural method includes condoms, diaphragms, etc., while barrier methods use of included method like periodic abstinence, actational amenorrhea, etc.

**Q15. Assertion:** Introduction of sex education in schools should be encouraged.

**Reason:** This will encourage children to believe in myths about sex related aspects.

**Q16. Assertion:** Amniocentesis is often misemployed.

**Reason:** Amniocentesis is meant for determining the genetic disorders in the foetus, but it is being used to determine the sex of the foetus, leading to death of the normal female foetus.

**Q17. Assertion:** Natality increases both population density and population size.

**Reason:** Natality increases the number of individuals in an area by births.

**Q18. Assertion:** Saheli, the new oral contraceptive for the females, contains a steroidal preparation.

**Reason:** It is "once in a day" pill with very few side effects.

**Q19. Assertion:** Rapid decline in death rate, MMR and IMR have lead to a staggering rise in population.

**Reason:** Such an alarming growth rate has lead to an absolute scarcity of even the most basic requirements, i.e. food and shelter.

**Q20. Assertion:** Zero population growth should be achieved as early as possible to control human population.

**Reason:** This as requires not two children per couple but a liltle more.



**Q21. Assertion:** Periodic abstinence is a method in which couples avoid from coitus from day 17 to 27 of menstrual cycle.

**Reason:** It is a very effective method and 100% sure of birth control.

**Q22. Assertion:** There is chance of fertilisation during 10 -17 days menstrual cycle.

**Reason:** Ovulation occurs during these days.

**Q23. Assertion:** Contraceptives are methods to prevent unwanted pregnancies.

**Reason:** Unwanted pregnancies can only be prevent by using oral contraceptives.

**Q24. Asertion:** Barrier methods prevent physical meeting of sperms and ova.

**Reason:** This prevents conception.

**Q25. Assertion:** Reusable contraceptives are not full proof method of contraceptions.

**Reason:** Diaphragms, cervical caps and vaults are barrier methods which prevent conceptions by blocking entry of sperms through cervix. They are reusable.

## ANSWER KEY 11 to 25

**Q11 :** (d) A person is reproductively healthy if he/she is capable of producing off springs.

**Q12 :** (b) Family planning helps in maintaining reproductive health.

**Q13 :** (a) The Reproductive and Child Health (RCH) Programme was launched in October 1997. The main aim of the programme is to reduce infant, child and maternal mortality rates.

**Q14 :** (c) Natural methods work on the principle of avoiding chances of meeting of ovum and sperm, e.g. periodic abstinence, lactiational amenorrhea. In barrier methods, ovum and sperm are prevented from physically meeting with help of a barrier, e.g. condoms, cervical caps, etc.

**Q15 :** (c) Introduction of sex education in schools should be encouraged to provide right information to the young children and to discourage them from believing in myths and having misconceptions about sexrelated aspects. Proper information about reproductive organs, adolescence and related changes, safe and hygienic sexual practices, sexually transmitted diseases (STDs), AIDS, etc., would help people, especially those in the adolescent age group to lead a reproductively healthy life.



**Q16 :** (a) Amniocentesis (amniotic fluid test or AFT) is a medical procedure used in prenatal diagnosis of chromosomal abnormalities and fetal infections, and also for sex determination, in which a small amount of amniotic fluid, which contains foetal tissues, is sampled from the amniotic sac surrounding a developing foetus, and then the foetal DNA is examined for genetic abnormalities.

**Q17 :** (a) Natality is generally expressed as number of birth per 1,000 individuals of a population per year. It increases the population size and population density.

**Q18 :** (d) Saheli – the new oral contraceptive for the females contains a non-steroidal preparation. It is a 'once a week' pill with very few side effects and high contraceptive value.

**Q19 :** (b) There is rapid decline in Infant Mortality Rate (IMR) and Maternal Mortality Rate (MMR). The recent World Bank data puts the MMR for India reported in 2015 at 174 per 100,000 live births, which is a significant decline from the 215 figure that was reported in 2010.

**Q20 :** (a) Two children per couple holds good for zero population growth. But in large democratic countries like India, it will take little more.

**Q21 :** (d) Periodic abstinence is a natural method in which the couples avoid or abstain from coitus from day 10 to 17 of the menstrual cycle when ovulation could be expected. The effectiveness of this method is limited because only a few women have regular menstrual cycles and the actual time of ovulation can be produced as the ovulation in humans occurs about 14 days before the onset of the next menstruation.

**Q22 :** (a) Ovulation is likely to occur between 10-17 days of menstrual cycle.

**Q23 :** (c) Contraceptives can be broadly grouped into natural, barrier, IUDs, oral contraceptives, injectables, implants and surgical methods.

**Q24 :** (a) Barrier methods include the diaphragm, cervical cap, male condom, and female condom and spermicidal foam, sponges, and film. Unlike other methods of birth control, barrier methods these are used only during sexual intercourse.

**Q25 :** (b) Reusable contraceptives do not guarantee prevention from accidental pregnancy.

