

- The normal functions of reproductive system is referred to as reproductive health. According to the world Health Organization (WHO), reproductive health means a total well-being in all aspects of reproduction i.e. Physical, emotional, behavioural and social. Therefore, a society with people having physically and functionally normal reproductive organs and normal emotional and behavioural interactions among them in all sex-related aspects might be called reproductively healthy.

### **Reproductive health - Problems and strategies :**

India was the first country in the world to kick off action plans and programmes at a national level to get total reproductive health as a social goal. These programmes are called 'Family Planning' and were initiated in 1952 and were periodically assessed over the past decades. Improved programmes covering wider reproduction-related areas are currently in operation under the popular name- 'Reproductive and Child Health Care (RCH) programmes'. Creating awareness among people about various reproduction, related aspects and providing facilities and support for building up a reproductively healthy society are the major tasks under these programmes. With the help of audio-visual and print media; governmental and non-governmental agencies have taken various steps to create awareness among the people about reproductive health. Parents, other close relatives, teachers and friends, also have major role in the dissemination of the above information. Introduction of sex education in schools should also be encouraged to provide right information to the young so as to discourage children from believing in myths and having misconceptions about sex related aspects. Proper information about reproductive organs adolescence and related changes, safe and hygienic sexual practices, sexually transmitted diseases (STD, AIDS etc would help people, especially those of adolescence age. Educating people, especially couples and those in marriageable age group, about available birth control options, care of pregnant mothers, post-natal care of mother and child; importance of breast feeding, equal opportunities for the male and the female child etc. will make society healthy. Awareness of problems like uncontrolled population growth and of social evils like sex-abuse and sex-related crimes etc needs to be created to take up necessary steps to prevent them and thereby build up a socially responsible and healthy society.

The successful implementation of various action plans for reproductive health requires strong infrastructural facilities, professional expertise and material support. It is essential to provide medical assistance and care to people in reproduction related problems like pregnancy; delivery, AIDS, abortions, contraception, menstrual problems, infertility etc. Implementation of better techniques and new strategies from time to time is required to provide more efficient care and assistance to people. Research on various reproduction related areas is encouraged and supported by governmental and non-governmental agencies.

### **Population Explosion and Necessity and Patterns of Birth control :**

In the developed European countries like Spain and Italy where the population is decreasing, this might be considered as an advantage, however, for the developing countries like India, population explosion is a nuisance and causes damage to the development of the country and its society. The developing countries are already facing a lack of resources, and with the rapidly increasing population the resources available per person are reduced further, leading to increased poverty,

malnutrition and other large population related problems.

India is the second most populous country in the world after China. India supports 16.87 percent of the world's population on its meager 2.4 percent world surface area. At the time of independence, the country's population was 342 million. The country's population size had grown from 361 million in 1951 to around 846 million in 1991 and 1027 million in 2001. The population of India almost triples during the period of 1951-2001. The phenomenal increase in the population during the last fifty years has led to rapid industrialization and high rate of urbanization which have created tremendous pressure on natural resources like land, air and water.

Decline in death rate and increase in birth rate are the main factors affecting population growth. Increased health facilities along with better living conditions also had impact on the growth of population. Such alarming growth rate could lead us to a scarcity of the basic requirements, i.e. food, shelter and clothing.

The government of India has been organizing several programmes for controlling the population increase and has been spending millions of rupees on controlling the birth rate. One of the programmes has been successful; and the rate of increase has also reduced, but has still to reach the sustainable rate. Our main goal to control population growth is decreasing the birth rate. Several government - funded agencies like the Family Planning Association of India spend billion of rupees on promoting family planning. These organizations aim to promote family planning as a basic human right. The family planning methods provided by the family planning programme are vasectomy, tubectomy, IUD (Intra Uterine Devices), copper - T, conventional contraceptives (Condoms, Diaphragms etc) and oral pills.

**Barrier method :** A variety of barrier methods suitable for both men and women are available. The aim of these methods is to prevent live sperm from meeting the ovum. Barrier methods have increased in popularity due to the absence of side effects and some protection from sexually transmitted diseases.

- (I) **Physical methods :** In this method condoms are used . It is made of thin rubber and used to cover the penis in the male or vagina and cervix in the female just before coitus so that the ejaculated semen does not enter into the female reproductive tract.

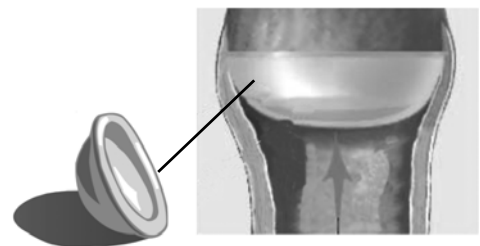
Diaphragm is a vaginal barrier made of synthetic rubber or plastic material and inserted into the female reproductive tract to cover the cervix during coitus. Variations of diaphragm include the conical cap; vault cap and the vinule cap.



**Condom for male**



**Condom for female**



**Diaphragm**

- (II) **Chemical Methods :** Spermicides are in the form of creams which attach themselves to sperm and inhibit oxygen uptake and kill sperms.

- (1) Commonly what is reproductive health ?  
 (A) Health of reproductive system (B) Maintenance of reproductive organs  
 (C) Common functions by reproductive system (D) Arrangement of reproductive organs
- (2) What is reproductive health with reference to WHO ?  
 (A) A total well - being in all aspects of reproduction, i.e. physical, emotional behavioural and social.  
 (B) A reference of reproduction aspects of physical and maintenance of emotional aspects.  
 (C) Maintenance of mental and social aspects in reference of reproduction.  
 (D) Maintenance of effects of behaviour and emotional in reference of reproduction.
- (3) India was first country in the world to kick off action plans and programmes at a national level of reproductive health, How ?  
 (A) With all acceptance, according to social aspects, legally improved.  
 (B) With all acceptance, according to individual voluntary improved.  
 (C) Partially, according to individual target voluntary improve.  
 (D) Partially, according to social target, legally improved.
- (4) Reproductive health programme are popular by which name ?  
 (A) Reproductive (B) Child health care  
 (C) Reproductive and child Health care (D) Reproductive or child health care
- (5) In adolescence which are the changes occurs in youth ?  
 (A) Neurochemical (B) Mental (C) Physical (D) Neurochemical, mental and physical changes
- (6) By which name programmes of population control is popular ?  
 (A) Child health care (B) Reproductive  
 (C) Family planning programme (D) Sterilization
- (7) In which countries population growth decreases ?  
 (A) In Britain (B) In entire Europe  
 (C) Spain and Italy like countries (D) In India and china
- (8) In which countries population explosion is a nuisance ?  
 (A) Spain and Italy (B) Britain and America  
 (C) Thailand and Greenland (D) China and India
- (9) By the population exposure which issues are arising in developing countries ?  
 (A) Lacks of resources  
 (B) increased in poverty  
 (C) Malnutrition  
 (D) Economically, socially as well as reduces in available resources, incresed poverty and malnutrition like issues.
- (10) How much population has of the world's population and How much land area covers it respectively ?  
 (A) 16.87%, 2.4% (B) 18.67%, 4.2%  
 (C) 67.16%, 4.2% (D) 76.16%, 4.2%
- (11) How much polulation at the time of independent in 1951 in India respectively ?  
 (A) 361 million, 342 million (B) 342 million, 361 million  
 (C) 432 million, 613 million (D) 613 million, 432 million
- (12) What is the population of India at 1991 and 2001 respectively ?  
 (A) 486 million, 2027 million (B) 846 million, 2027 million  
 (C) 646 million, 1027 million (D) 486 million, 1027 million

- (13) Which are the main causes for tripled population growth in 1951-2001 ?
- (A) Rapid industrialisation, urbanisation.  
 (B) Rapid industrialisation, urbanisation increase in birth rate.  
 (C) Rapid industrialisation, urbanisation, decrease in death rate.  
 (D) Rapid industrialisation, urbanisation, decrease in death rate, revolution in clinical facilities.
- (14) Which option is correct from following for physical barrier method devices ?
- (A) Condom, female Condom, Copper - T                      (B) Condom, Diaphragm, loop  
 (C) Condom, female Condom, Diaphragm                      (D) Loop, Copper - T
- (15) Which types of chemical choosen in chemical barrier method ?
- (A) Which induce production of sperm have rapid locomotory capacity of sperms.  
 (B) Which induce production of sperm, rapid locomotory capacity of sperms by the production of foam and survival of sperm by availability of O<sub>2</sub>.  
 (C) Creans which produce foam for destroyed sperm, which join with sperm and decrease availability of O<sub>2</sub> and kill-the sperm.  
 (D) Foam which kills sperm, which digest sperm.

**Answers : (1-C), (2-A), (3-A), (4-C), (5-D), (6-C), (7-C), (8-D), (9-D), (10-A), (11-B), (12-C), (13-D), (14- C), (15-C)**

**Intrauterine devices (IUDs) :** Intrauterine devices contraception could also be achieved by introducing a foreign body into the uterus of the female. Such devices are known as Intra uterine Devices (IUDs).

The non-medicated or inert IUDs are often referred to as first generation IUDs. The copper IUDs comprise the second generation IUDs which release metal ions which have strong anti fertility effect. The third generation IUDs release hormones (progesterone) which have a direct local effect on the uterine lining.

**Hormonal Methods :** Hormonal contraceptives when properly used are the most effective spacing methods of contraception. Oral administration of small doses of progesterones or progestogen estrogen combination in the form of tablets which are known as the pills. The pill is given orally for 21 consecutive days beginning on the 5th day of the menstrual cycle followed by a break of 7 days during which period menstruation occurs. They are used to prevent the release of ovum from the ovary and also render the cervical mucus thick and scanty and thereby, inhibit sperm penetration.

‘Saheli’ The new oral contraceptive for female contains a nonsteroidal preparation. It was developed at ‘Central Drug Research Institute (CDRI)’ in lucknow, India. It is a ‘once a week’ pill with few side effect and high contraceptive value.

**Sterilization :** Sterilization is generally advised for the male-female partner as a terminal method to prevent any more pregnancies. Surgical intervention blocks gamete transport and thereby



- (B) First generation IUDs = Loop, Second generation IUDs = Copper - T, Third generation IUDs = Hormonal released devices
- (C) First generation IUDs : Hormonal released devices, Second generation devices = copper - T, Third generation IUDs = Loop.
- (D) First generation IUDs = Loop, Second generation IUDs = Hormonal released devices, Third generation IUDs = Copper - T.
- (18) Second generation IUDs is working on which principle ?
- (A) On metal ion  
 (B) On the acute response against fertility of free metal ion.  
 (C) On metal Fertility of free metal ion.  
 (D) On response fertility.
- (19) Which hormones are useful for hormonal method which have combined effect as oral pill which is useful for contraceptives ?
- (A) GTH, LH            (B) GTH, Estrogen    (C) Estrogen, progesterone    (D) LH, progesterone
- (20) From which time starts to take pills are taken for contraceptive purpose ?
- (A) Minus the 7 days of the menstrual, cycle time.  
 (B) 7 Minus the 7 days of the menstrual cycle time, star on the 5th day of the menstrual cycle.  
 (C) As soon as menstrual cycle starts  
 (D) Any time take
- (21) What is the function of contraceptive pills ?
- (A) To inhibits the releasing of eggcell from ovary.  
 (B) Create the inactive and mucilage thick layer of cervix.  
 (C) To prevent the releasing of eggcell from the ovary, create the inactive and mucilage thick layer of cervix so no transport of eggcell.  
 (D) Present the entry of sperm in cervix.
- (22) 'Saheli' contraceptive pill is which type of the chemical pill ?
- (A) Non steroidal    (B) Catecholamine type            (C) Steroidal            (D) Oxidantal
- (23) What is full form of CDRI ?
- (A) Central Drugs and Reproductive Institute    (B) Central Drugs and Reproductice Institute  
 (C) Central Drugs and Research Institute        (D) Central Divices and Research Institute
- (24) What is sterilization ?
- (A) Surgery in male to avoid pregnancy.  
 (B) Surgery in female to avoid pregnancy.  
 (C) Surgery in male and female for pregnancy.  
 (D) Surgery in male and female to avoid pregnancy.
- (25) In vasectomy and tubectomy surgery of which parts can be done ?
- (A) Vasa deferentia and fallopian tube            (B) Epididymis and fallopian tube  
 (C) Inguinal canal and oviduct                    (D) Vas efferentia and oviduct
- (26) In which periodic time the couples shall avoid coitus ?
- (A) During 10 to 17 days of the menstrual cycle (B) During 10 to 17 days of the menstrual cycle  
 (C) During 570 to days of uterine cycle.        (D) During 17 to 27 days of menstrual cycle.
- (27) What is meaning of lactational amenorrhea ?
- (A) Menstruation cycle does not occur during the period of intense lactation following parturition.  
 (B) Menstrual is absent after parturition.  
 (C) Menstruation cycle is absent during lactation.  
 (D) Mentruation is absent during to feed baby.

- (28) Which method is more favourable in recent era ?  
 (A) Physical barrier method (B) Chemical barrier method  
 (C) Hormonal method (D) Natural barrier method
- (29) After which method no chances of embryo implantation ?  
 (A) Physical barrier method (B) Chemical barrier method  
 (C) Sterilization (D) Natural barrier method

**Answers : (16-C), (17-B), (18-B), (19-C), (20-B), (21-C), (22-A), (23-C), (24-D), (25-A), (26-B), (27-A), (28-A), (29-C)**

**Medical Termination of pregnancy (MTP) :** Voluntary termination of pregnancy before foetus becomes viable is called medical termination of pregnancy (MTP) or induced a abortion. Nearly 45 to 50 million MTPs are performed in a year all over the world. Whether to accept / leagize MTP or not is a subject debated in many countries due to emotional, ethical, religious and social issues involved in it.

The MTP Act was passed by Indian Government in 1971 and it comes into force from April 1, 1972. It is a health care measure, which helps to reduce maternal mortality resulting from illegal abortion. MTP is required to terminate pregnancy in following cases:

- Continuation of pregnancy might endanger the mother's life.
- There is substantial risk of the child being born with serious handicaps.
- Where the pregnancy is the result of rape.
- Where the pregnancy is unwanted resulting from failure of any contraceptive device.

MTP can be performed only by registered doctors and it can be done only upto 20 weeks of pregnancy only.

- **Sexually Transmitted Diseases (STDs) :** Diseases or infection which are transmitted through sexual intercourse are collectively called sexually trassmitted diseases (STDs) . It is caused by baeteria, virus, protozoan and fungi. STDs are becoming a major health problem in India. More than 20 pathogens have been found to be spread by sexual contact. The highest cases are observed in the 20-24 age groups it is followed by the 25-29 age group and the 15-19 age group. Some of these diseases are summarized below.

#### Summary of STDs

Name of Disease	Name of pathogens	Major Symptoms
(1) Gonorrhoea	<i>Neisseria gonorrhoeae</i> (Bacteria)	- Pain during passing urine. - Pain in lower abdomen.
(2) Syphilis	<i>Treponema pallidum</i> (Bacteria)	- A painless rush. - Flu like illness, tiredness. - White patches on the toungue or roof of the buccal cavity - Patchse hair loss

(3) Genital herpes	Herpes simplex virus	<ul style="list-style-type: none"> <li>- Many people will not have any visible signs and symptoms.</li> <li>- If person do get signs and symptoms they feel uneasi-ness.</li> <li>- Symptoms such as fever, tiredness, headache, itching in the genital or anal area etc are seen.</li> <li>- Pain while passing urine.</li> <li>- Small, fluid -filled blisters anywhere in the genital or anal area.</li> </ul>
(4) Hepatitis - B	Hepatitis B virus	<ul style="list-style-type: none"> <li>- Symptoms like fever, joint pain, fatigue, loss of appetite, jaundice, pain in upper light abdomen etc. are seen.</li> </ul>
(5) AIDS	Human immunodeficiency virus (HIV)	<ul style="list-style-type: none"> <li>- Person loses immunity so all diseases are dominated.</li> <li>- No specific symptoms are seen, but some symptoms like, fever for over months, diarrhoea, rapid weight loss, a cough that won't go away short term memory loss etc. are seen.</li> </ul>
(6) Trichomoniasis	Trichomonas vaginalis (Protozoan)	<ul style="list-style-type: none"> <li>- Soreness, inflammation and itching in and around vagina.</li> <li>- Pain or burning sensation while passing urine.</li> </ul>

The diagnosis of these diseases is based on causative organism and the symptoms. The medical examination and symptoms reveal their STD nature. Certain diagnostic tests for these diseases includes culture of the pathogenic organism. Through culturing, microorganisms can be isolated, observed and identified, by microscopic examination using special stains ELISA (Enzyme Linked Immune Absorbent Assay) test is used for identification of antigen-antibody. In ELISA method, antibodies against HIV antigen are search out from the patient's blood. This helps in establishing the identification of the genetic material of pathogenic organism is utilized. Polymerase Chain Reaction (PCR) : In the PCR method the specific section of a gene of the pathogenic organism is multiplied with the help of a suitable primer.

Someone has said "prevention is better than cure". Thus prevention of STDs is in your hands. You could be free of these infections if you follow the simple principles given below.

- Avoid sex with unknown partners.
- Always use condoms during coitus.
- In case of doubt, consult a doctor and get treatment if the disease is diagnosed.

- (30) What induces abortion ?  
 (A) Voluntary type abortion  
 (B) To prevent of embryo implantation voluntary  
 (C) A method of voluntary termination of pregnancy before foetus viability  
 (D) Abortion induced by pills
- (31) How many people shows MTP. ( Medical Termination of Prengnancy) in a year all over the world ?  
 (A) nearly 35 to 40 million people (B) nearly 45 to 50 million people  
 (C) nearly 45 to 50 million females (D) nearly 50 to 55 million people
- (32) Which types of question are arising against - MTP ?  
 (A) Emotional and, ethical (B) Religious and ethical  
 (C) Emotionad, ethical religious and social (D) None of above
- (33) The MTP Act was passed in 1971 and it came into force from ?  
 (A) 1<sup>st</sup> April, 1972 (B) 1<sup>st</sup> April, 1971 (C) 1<sup>st</sup> April, 1973 (D) 1<sup>st</sup> April, 1970
- (34) By MTP Act which two programme will succeed ?  
 (A) Control on population growth, Birth rate  
 (B) Control on population growth, Death rate  
 (C) Control of population growth, Mother and child health care  
 (D) Family planning, Control of population growth
- (35) Which programme is inducable by the given statements ?  
 Statement : 1 Continous pregnancy is harmful for mother health.  
 Statement : 2 There is substantial risk of the child being born with serious handicaps.  
 Statement : 3 Where the pregnancy is the result of rape.  
 Statement : 4 Where the pregnancy is unwanted resulting from failure of any contraceptive device.  
 (A) Family planning (B) Child health care (C) Control of population growth (D) MTP
- (36) After How much period MTP is advicable ?  
 (A) upto 20 weeks or 140 days or four months  
 (B) Upto 10 weeks or 70 days or three months  
 (C) Upto 30 weeks or 210 days or seven and half months.  
 (D) Upto 25 weeks or 175 days or five months.
- (37) What is Sexual Transmitted Diseases ?  
 (A) Diseases occurs due to lack of sexual knowledge.  
 (B) Diseases occurs cause the sexual development.  
 (C) Diseases occurs due to incomplete sexual knowledge.  
 (D) Disease occurs by sexual intercourse.
- (38) What is full form of STDs ?  
 (A) Standard Terminational Diseases (B) Standard Trasmitted Diseases  
 (C) Sexual Terminational Diseases (D) Sexual Transmitted Diseases
- (39) By which microbes STDs are transmited ?  
 (A) Virus, bacteria (B) Fungi, protozoan  
 (C) Virus, bacteria, fungi (D) Virus, bacteria, fungi, protozoan

- (40) Choose the correct option according to evolutionary ascending order classification of STDs vectors.  
 (A) Virus, Bacteria, Fungi, protozoa, (B) Viras, Bacteria, protozoa, fungi  
 (C) Virus, protozoa fungi, bacteria (D) Protozoa, fungi, bacteria, virus
- (41) How many STDs vectors are approximately present ?  
 (A) Less than 20 (B) More than 20 (C) Only 20 (D) Only 10
- (42) Which age group pateints are highest suffering by STDs ?  
 (A) 15-19 (B) 20-24 (C) 25-29 (D) 30 - 35
- (43) Which microbe is responsible for the spread gonorrhoea and which are the major symptoms of it ?  
 (A) *Neisseria gonorrhoea*, pain during passing urine, pain in lower abdomen.  
 (B) *Siphilis gonorrhoeae*, pain during passing urine, pain in lower abdomen.  
 (C) *Neisseria gonorrhoeae*, burning in urethra, headache  
 (D) *Streptococcus gonorrhoeae*, pain during passing urine, pain in lower abdomen.
- (44) Main symptoms of syphilis and which is the correct name of disease vector ?  
 (A) A painless rash, flu like illness, tiredness, white patches on the tongue or roof of the buccal cavity, patchy hairloss, *treponema pallidium*.  
 (B) A painless rash, tiredness, Flu like illness; *Treponema pallidium*.  
 (C) White patches on the tongue or roof of the buccal cavity, *treponema valgaris*.  
 (D) Patches hairloss, *Treponema streptococcus*.
- (45) Give the name of disease vector /pathogen of genital herpes and identify major symptoms of it ?  
 (A) *Herpes zoster*, person do get signs and symptoms they are feeling of uneasiness, symptoms such as fever, tiredness, headache, itching in the genital or anal area etc. are seen. Pain while passing urine.  
 (B) *Herpes zoster*, cysts in the genital or anal area.  
 (C) *Herpes simplex* virus, person do get signs and symptoms they are feeling of uneasiness, symptoms such a fever, tiredness, headache, itching in the genital or anal area etc are seen, pain while passing urine, small fluid - filled blisters any where in the genital or anal area.  
 (D) None of the above.
- (46) Name the pathogen of Hepatitis B and identify its major symptoms.  
 (A) Hepatitis B virus, fever, joint pain, fatigue loss of appetite, Jaundice, pain in upper right abdomen etc are seen.  
 (B) Hepatitis B - Virus, uneasiness  
 (C) Hepatitis B - Virus, only pain in joint.  
 (D) Hepatitis - B Virus, decreases immunity.
- (47) Which symptom is not include in symptoms of AIDS ?  
 (A) Occurance of various diseases when person looses immunity.  
 (B) Fever for over months, accidently diarrhoea for long duration.  
 (C) Rapid weight loss, short term memory loss  
 (D) Loss of immunity in body, uncertain changes in nature, shivering experienced in body.
- (48) What is full form of AIDs ?  
 (A) Acquire Immuno Defensive Syndrome (B) Acquire Immuno Defending Syndrome  
 (C) Acquire Immuno Deficiency Syndrome (D) Aquire Immuno Deficiency System

- (49) Name the pathogen of Trichomoniasis and identify major symptoms of it ?  
 (A) *Trichomonas vaginalis*, soreness, inflammation, itching in and around vagina; pain or a burning sensation while passing urine.  
 (B) *Trichomonas derminalis*, soreness, inflammation itching in and around vagina.  
 (C) *Trichomonas varginalis*, soreness, inflammation, itching in and around vagina.  
 (D) *Trichomonas varginalis*, soreness, burning in urine passing.
- (50) For the diagnosis, which methods are used sequentially ?  
 (A) PCR, DNA, hybridization, ELISA, Specific staining method, Isolation of micro organisms, culture pathogenesis.  
 (B) Culturioaof patheges, Isolation of microbes, specific stain method, DNA hybridization, PCR method.  
 (C) Culture of pathogenic organisms, Isolation of microbes specific stain method, ELISA method, DNA hybridization, PLR method.  
 (D) Culture of pathogenic organisms, Isolation of microbes, stain method, DNA hybridization, ELISA method, PCR method.
- (51) What occurs in ELISA (Enzyme Linked Immuno Absorbant Assay) method ?  
 (A) Emzymatic mechanism can occur (B) Synthesis of antibody  
 (C) Search of antigen (D) Find out the HIV antigen and antibody from the blood
- (52) What is in DNA hybridisation and PCR method respectively ?  
 (A) A short polynucleotide chain of the genetic material of the pathogenic organism is utilized, the specific pieces of gene of the pathogenic organism is multiplied with the help of a suitable primer.  
 (B) A long polynucleotide chain of the genetic material of the pathogenic organism is utilized, the undefinated pieces of gene of the pathogenic organisms is multiplied with the help of a suitable primer.  
 (C) The pieces section of gene of the pathogenic organism is multiplied by three times.  
 (D) DNA replication and culturing of gene by primer can be done.
- (53) Which is not statement of preventing of STDs ?  
 (A) Avoid sex with unknown partners.  
 (B) Always use condoms during coitus.  
 (C) In case of doubt, consult a doctor and get treatment.  
 (D) Always avoid condoms during coitus.
- (54) Rapid weight loss; coughing upto long time, influenza, fever long time, Which is not diagnostic. Whooping, memoryloss of short duration; Dominancy occurs on main immunity and complimentary of Human body system, Failure of immunity. These symptoms of which disease and what is full name of this disease ?  
 (A) AIDS, HIV, Human Immuno Deficiency Virus  
 (B) AIDS, HIV- Huminity Immuno Deficiency Virus  
 (C) AIDS, HIV- Human Immuno Deficieney vaccine  
 (D) AIDS, HIV- Human Immuno Aquire, Deficiency Vaccine

<p><b>Answers : (30-C), (31-C), (32-C), (33-A), (34-C), (35-D), (36-A), (37-D), (38-D), (39-D), (40-A), (41-B), (42-B), (43-A), (44-A), (45-C), (46-A), (47-D), (48-C), (49-A), (50-C), (51-D), (52-A), (53-D), (54-B)</b></p>
--

- (4) **Infertility** : When female loss ability of embryo implantation and egg formation and ability to transfer of egg cell. Even though loss or lesser ability of spermatogenesis in male which very less formation of sperm then couple can not found reproductive fertility. So it known as infertility. Examination and diagnostic methods are available for the infertility.

**Amniocentesis :** Amniocentesis is also known as amniotic fluid test or AFT. It is a medical procedure used in prenatal diagnosis of chromosomal abnormalities, in which a small amount of amniotic fluid is sampled from the amnion surrounding a developing foetus, and its DNA is examined for genetic abnormalities. Using this process the gender of the foetus can also be determined and hence this procedure has been legally restricted for sex determination in India.

A number of couples all over the world including India are facing infertility. i.e. they are unable to produce children. In India, mostly female is blamed for this, but it is not always true; the problem can be in the male or female partner. Infertility clinic could help in diagnosing and curing these disorders and helping these types of couples to have children. The couples could be assisted to have children through certain special techniques commonly known as Assisted Reproductive Technologies (ART). Assisted Reproductive Technology (ART) is general term referring to methods used to achieve pregnancy by artificial or partially artificial means. Common methods of ART are In Vitro Fertilization (IVF), Zygote Intra Fallopian Transfer (ZIFT) and Gamete Intrafallopian Transfer (GIFT).

**In Vitro Fertilization (IVF) :** It means fertilization outside of the body. IVF is the most effective ART. It is often used when a woman's fallopian tubes are blocked or when a man produces very few sperms. Doctors treat the woman with a drug that causes the ovaries to produce multiple eggs. Once mature, the eggs are removed from the woman. They are kept in a dish in the lab along with the man's sperm for fertilization, After 3 to 5 days, healthy embryos are implanted in the woman's uterus.

**Zygote Intra Fallopian Transfer (ZIFT) or Total Embryo Transfer :** It is similar to IVF. Fertilization occurs in the laboratory. Then the very young embryo is transferred to the fallopian tube instead of uterus.

**Gamete Intra Fallopian Transfer (GIFT) :** It involves transferring eggs and sperm into the woman's fallopian tube. So fertilization occurs in the woman's body.

ART procedures sometimes involve the use of donor eggs (eggs from another woman), donor sperm or previously frozen embryos. Donor eggs are sometimes used for women who can not produce eggs. Also, donor eggs or donor sperm are sometimes used when the woman or man has a genetic disease that can be passed on to the baby. An infertile woman or couple may also use donor embryos. These are embryos that were either created by couples in infertility treatment or were created from donor sperm and donor eggs. The donated embryo is transferred to the uterus. The child will not be genetically related to either parent.

---

(55) What is an infertility ?

- (A) Loss the capacity of embryo implantation in female and pregnancy.
- (B) Loss of egg formation in female and transport capacity.
- (C) Loss of sperm capacity by male and very less production of sperms.
- (D) All of the above.

(56) What is Amniocentesis ?

- (A) Examining of blastomeres
- (B) Examining blastocoele
- (C) Examining of amniotic fluid blastula
- (D) Examine of nucleus of blastomeres

- (57) When AFT (Amniotic Fluid Techniques ) or Amniosentensis can apply ?  
 (A) After birth of baby (B) Before birth of baby  
 (C) At the time of baby birth (D) At the time of implantation
- (58) For the clinical diagnosis from where amiotic fluid is taken ?  
 (A) From amniotic sac (B) From cytoplasm of cells  
 (C) From cells of chorinary layer (D) From the somatic cells
- (59) Why AFT is applied ?  
 (A) For the examine of disorders of chromosomal study  
 (B) For the examine sex  
 (C) To examine abnormality of chromosomes and sex  
 (D) To examine abnormality of chromosomes or sex
- (60) What is full form of ART ?  
 (A) Aquerate Reproductive Technique (B) Acalte Reproductive Technique  
 (C) Assesory Reproductive Technique (D) Artificial Reproductive Technique
- (61) What is full form of IVF ?  
 (A) Internal Vaccine Fertilization (B) Internal Veins Fertilization  
 (C) Intra Veins Fertilization (D) In Vitro Fertilization
- (62) When IVF is apply ?  
 (A) Failure of oviduct (B) No formation of egg cell  
 (C) less counting of sperms (D) Absence of gonad
- (63) What is full form of ZIFT ?  
 (A) Zygote Intra Fallopian Transfer (B) Zoospore Intra Fallopian Transfer  
 (C) Zoosperm Intra Fallopian Transfer (D) Zygote Internal Fallopian Tube Transfer
- (64) Where fertilization occurs in ZIFT and where embryo is implanted ?  
 (A) In uterus, in oviduct (B) In laboratory, in uterus  
 (C) In laboratory, in oviduct (D) In oviduct, in laboratory
- (65) What is GIFT ?  
 (A) Gamete Internal Fallopian Transfer (B) Gamete Intra Fallopian Transfer  
 (C) Gonad Internal Fallopian Transfer (D) Gonad Intra Fallopian Transfer
- (66) In GIFT where fertilization occurs ?  
 (A) In female body (B) In oviduct (C) in uterus (D) In cervix
- (67) Which animal group is having first amniotic sac ?  
 (A) Amphibian (B) Reptiles (C) Aves (D) Mammals

● **A - Assertion, R - Reason type questions**

**Choose the correct option from the following for given questions.**

- (A) A and R both are correct, while R is correct explanation of A.  
 (B) A and R both are correct but R is not correct explanation of A.  
 (C) A is correct, but R is wrong.  
 (D) A is wrong but R is correct.

(68) Assertion A : Highly pressure occurs in India on land, air and water.

Reason R : India supports 16.87% of the worlds population.

- (A) (B) (C) (D)

- (69) Assertion A : Population growth is an essential evil.  
Reason R : By the growth occur in population social crime, sexual crime and available resources, decreases.  
(A) (B) (C) (D)
- (70) Assertion A : Various programmes can not applied for reproductive health by non-governmental organizations  
Reason R : Professionals and equipments are necessary for the programmes.  
(A) (B) (C) (D)
- (71) Assertion A : Copper - T is included in second generation IUDS.  
Reason R : Copper has acute antifertility effects.  
(A) (B) (C) (D)
- (72) Assertion A : The couples avoid from coitus from day 10 to 17 days of the menstrual cycle.  
Reason R : During the menstrual cycle 10 to 17 days possibility of fertilization is more.  
(A) (B) (C) (D)
- (73) Assertion A : Pills are taken as a contraceptives in orally.  
Reason R : Which has progesterone and estrogen combines form.  
(A) (B) (C) (D)
- (74) Assertion A : Bacteria, Virus, Protozoa and fungi are cause of STDs.  
Reason R : Highest cases of STDs in age group of 25 to 29.  
(A) (B) (C) (D)
- (75) Assertion A : Main aim of chemical method is that conjugation occur of viable sperm and egg cell.  
Reason R : Sperm killer foam attached with sperm and decrease  $O_2$  consumption capacity and sperms die.  
(A) (B) (C) (D)
- (76) Assertion A : In Gonorrhoea, painful urine passing occurs.  
Reason R : In syphilis white patches on the tongue or roof of the buccal cavity occurs.  
(A) (B) (C) (D)
- (77) Assertion A : Amniocentesis is also known as AFT.  
Reason R : By this method sex determination can be done.  
(A) (B) (C) (D)
- (78) Assertion A : In GIFT method fertilization can occur in female body.  
Reason R : In this method egg cells and sperms can transfer in oviduct / fallopian tube of female.  
(A) (B) (C) (D)
- (79) Assertion A : In vasectomy a small part of the vas deferens is removed through a small incision in the scrotum.  
Reason R : In tubectomy, a small part of the fallopian tube is removed by small incision in the abdomen or vaginal tract.  
(A) (B) (C) (D)
- (80) Assertion A : In our country abortion is illegal.  
Reason R : When abortion is result of rape.  
(A) (B) (C) (D)

- (81) Assertion A : In IVF fertilization, occurs outside of the body.  
Reason R : In ZIFT fertilization occurs in laboratory, after that foetus is transferred in the fallopian tube.  
(A) (B) (C) (D)
- (82) Assertion A : Saheli is taken once in a week.  
Reason R : Use of Saheli sometime it produces side effects also.  
(A) (B) (C) (D)
- (83) Assertion A : AFT test is used for to determine genetic disorder and sex determination of foetus.  
Reason R : Small amount of amniotic fluid is taken from surrounding embryo.  
(A) (B) (C) (D)
- (84) Assertion A : After the pregnancy MTP can be applied 24 to 30 weeks.  
Reason R : MTP is necessary while it is result of rape.  
(A) (B) (C) (D)

**Answers : (55-D), (56-C), (57-B), (58-A), (59-D), (60-D), (61-D), (62-C), (63-A), (64-C), (65-B), (66-A), (67-B), (68-A), (69-B), (70-D), (71-A), (72-B), (73-A), (74-C), (75-D), (76-B), (77-B), (78-A), (79-B), (80-B), (81-B), (82-B), (83-B), (84-D)**

- (85) **Column : I** **Column : II**  
 (P) Male condom (i) Uterus (A) (P-ii) (Q-iv) (R-i) (S-iii)  
 (Q) Female condom (ii) Penis (B) (P-ii) (Q-iii) (R-iv) (S-i)  
 (R) Diaphragm (iii) Vaginal tract (C) (P-ii) (Q-i) (R-iv) (S-iii)  
 (S) Copper - T (iv) Cervix (D) (P-ii) (Q-iii) (R-iv) (S-i)
- (86) **Column : I** **Column : II**  
 (P) ZIFT (i) External fertilized cell by sperm and ovum which transfer in fallopian tube.  
 (Q) GIFT (ii) External fertilized embryo is implanted in uterus.  
 (R) IVF (iii) Donated embryo is implanted in uterus.  
 (S) ART (iv) Gametes are transferred in oviduct /fallopian tube.  
 (A) (P-i) (Q-iv) (R-ii) (S-iii)  
 (B) (P-i) (Q-ii) (R-iv) (S-iii)  
 (C) (P-iv) (Q-i) (R-iii) (S-ii)  
 (D) (P-ii) (Q-iii) (R-i) (S-iv)
- (87) **Column : I** **Column : II**  
 (P) Gonorrhoea (i) Herpes simplex (A) (P-ii) (Q-i) (R-iii) (S-iv)  
 (Q) Syphilis (ii) *Neisseria gonorrhoeae* (B) (P-iii) (Q-iv) (R-ii) (S-i)  
 (R) Genetical Herpes (iii) *Trichomonas vaginalis* (C) (P-ii) (Q-iii) (R-i) (S-iv)  
 (S) Trichomoniasis (iv) *Treponema pallidum* (D) (P-ii) (Q-iv) (R-i) (S-iii)
- (88) **Column : I** **Column : II**  
 (P) ELISA - Test (i) Ag. Ab. test. (A) (P-i) (Q-ii) (R-iii)  
 (Q) DNA hybridization (ii) With help of primer double stranded genetic segment of microbe is obtained (B) (P-iii) (Q-i) (R-ii)  
 (C) (P-i) (Q-iii) (R-ii)  
 (R) PCR (iii) Short chain of polynucleotide chain consume of genetic material of microbes (D) (P-ii) (Q-i) (R-iii)

(89) What is indication about figure B from given diagrams ?



- (A) Female condom      (B) Male condom      (C) Diaphragm      (D) Sterilization

(90) What is variation included in given figure - c ?

- (A) Cone shaped cap      (B) Dome shaped cap      (C) Traditional cap      (D) A and B both

(91) What is the principle to present the conjugation of viable - sperm with egg cell from which given figure above ?

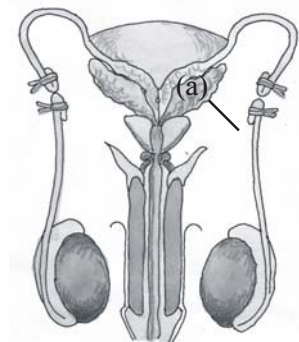
- (A) A      (B) B      (C) C

(92) What is indicating part A in given diagram ?

- (A) Female condom      (B) Sterilization  
(C) Diaphragm      (D) Male condom

(93) Given diagram represents .....

- (A) Tubectomy      (B) Vasectomy  
(C) Sterilization in male      (D) A and B both



**Answers : (85-B), (86-A), (87-D), (88-C), (89-A), (90-D), (91-D), (92-D), (93-D)**

● **Question for NEET :**

(94) Testtube baby means when baby is born .....

- (A) develops from the unfertilized egg/ovum.  
(B) it is developed in test tube  
(C) it is developed by tissue culture method.  
(D) egg cell is fertilized externally than trassplant in uterus.

(95) Which females are advised for GIFT method ?

- (A) Who can not produce egg cell / ovum.  
(B) Who can not maintain foetus / embryo in uterus.  
(C) Whose cervix portion in narrower, thus sperms can not passed through it.  
(D) Who can not produce specific atmosphere for fertilization.

(96) How many weeks after pregnancy is safe for MTP ?

- (A) 8 Weeks      (B) 18 Weeks      (C) 12 Weeks      (D) 6 Weeks

(97) Which method of contraception is more chosen in india recently ?

- (A) Cap of cervix      (B) Tubectomy  
(C) Diaphragms      (D) IUDs (Intra uterine devices)

- (98) Copper containing IUDs put in uterus, copper ions are released and act as a ..... .
- (A) uterus misbehave for embryo implantation  
 (B) rises in the activity of sperms  
 (C) locomotory capacity of sperm is stopped  
 (D) stop the process of ovulation..
- (99) Do matches according to method (p-s) and its uses (a -d) which is given below and choose correct option for these.

**Column - I (Methods)**

**Column - II (Types of uses)**

(P) Pills

(a) Prevents the sperms to reach cervix

(Q) Condom

(b) To inhibit the embryo implanlation

(R) Vasectomy

(c) Prevents the production of ova.

(S) Copper - T

(d) No sperms are found in semen.

(A) (P-c), (Q-a), (R-d), (S-b)

(B) (P-d), (Q-a), (R-b), (S-c)

(C) (P-c), (Q-d), (R-a), (S-b)

(D) (P-b), (Q-c), (R-a), (S-d)

- (100) Read given statement carefully and identify that which are two statements are correct for contraceptive methods ?

Statement (i) During the first trimster MTP is safe.

Statement (ii) Mother feeds child upto two years, commonly in that period no probability of pregnancy.

Statement (iii) Copper - T like devices which is IUDs resultant contraceptive.

Statement (iv) For prevention of pregnancy contraceptive pills should be taken for a week after coitus.

Above given statements which two statements are correct ?

(A) (ii) and (iii)

(B) (iii) and (iv)

(C) (i) and (iii)

(D) (i) and (ii)

**Answers : (94-D), (95-A), (96-B), (97-D), (98-C), (99-A) , (100-C)**

# CONCEPT MAP

## Reproductive Health

