

# Reproductive Health

## Question1

**Match List-I with List-II relating to examples of various kind of IUDs and barrier:**

	List-I		List-II
A.	Copper releasing IUD	I	Vaults
B.	Non-medicated IUD	II	Multiload 375
C.	Contraceptive barrier	III	LNG-20
D.	Hormone releasing IUD	IV	Lippes loop

**Choose the correct answer from the options given below:**

**[NEET 2024 Re]**

**Options:**

A.

A-II, B-IV, C-III, D-I

B.

A-IV, B-III, C-I, D-II

C.

A-II, B-I, C-III, D-IV

D.

A-II, B-IV, C-I, D-III

**Answer: D**

**Solution:**

The correct answer is option (4) because

- Multiload 375 is a copper releasing IUD which suppresses sperm motility and fertilizing capacity of sperms.
- Lippes loop is a non-medicated intra uterine device.
- Vaults are barrier type of contraceptives which prevent physical meeting of ovum and sperms.
- LNG-20 is a hormone releasing IUD that makes the uterus unsuitable for implantation and the cervix hostile to the sperms.

Hence the correct matches are

A. Copper releasing IUD - Multiload 375

B. Non-medicated IUD - Lippes loop

C. Contraceptive barrier - Vaults

## Question2

**Following is the list of STDs. Select the diseases which are not completely curable.**

- A. Genital warts**
- B. Genital herpes**
- C Syphilis**
- D Hepatitis-B**
- E Trichomoniasis**

**Choose the correct answer from the options given below:**

**[NEET 2024 Re]**

**Options:**

A.

A and D only

B.

B and D only

C.

A and C only

D.

D and E only

**Answer: B**

**Solution:**

The correct answer is option (2) -B and D only because except for hepatitis -B, genital herpes and HIV infections, other sexually transmitted diseases are completely curable, if detected early and treated properly.

- Genital warts, syphilis and trichomoniasis are completely curable STDs upon proper detection and treatment.
- Option (1) is incorrect as it includes genital warts
- Option (3) is incorrect as it includes genital warts and syphilis.
- Option (4) is incorrect as it includes trichomoniasis.

Genital warts, genital herpes and hepatitis -B are viral STDs, syphilis is a bacterial and trichomoniasis is a protozoan STD.

---

## Question3

**Which of the following is not a natural/traditional contraceptive**

**method?**

**[NEET 2024]**

**Options:**

A.

Coitus interruptus

B.

Periodic abstinence

C.

Lactational amenorrhea

D.

Vaults

**Answer: D**

**Solution:**

The correct answer is option (4) as

Vault is a barrier method of contraception which is made of rubber that is inserted into the female reproductive tract to cover the cervix during the coitus.

• Option (1) is incorrect as coitus interruptus is a natural method of contraception in which male partner withdraws his penis from the vagina just before ejaculation so as to avoid insemination.

• Option (2) is incorrect as periodic abstinence is also a natural method of contraception in which couples avoid coitus during the fertile period.

Option (3) is incorrect as lactational amenorrhea is also a natural method of contraception which is based on the fact that ovulation and therefore the cycle do not occur during the period of intense lactational following parturition.

---

## Question4

**Given below are two statements: One is labelled as Assertion A and the other is labelled as Reason R:**

**Assertion A : Breast-feeding during initial period of infant growth is recommended by doctors for bringing a healthy baby.**

**Reason R : Colostrum contains several antibodies absolutely essential to develop resistance for the new born baby.**

**In the light of the above statements, choose the most appropriate answer from the options given below:**

**[NEET 2024]**

**Options:**

A.

Both A and R are correct and R is the correct explanation of A

B.

Both A and R are correct but R is NOT the correct explanation of A

C.

A is correct but R is not correct

D.

A is not correct but R is correct

Answer: A

Solution:

Correct answer is option (1)

Breast-feeding during initial period of infant growth is recommended by doctors for bringing a healthy baby as colostrum contains several antibodies absolutely essential to develop resistance for the new born baby

## Question5

Match List I with List II

	List-I		List-II
A.	Non-medicated IUD	I.	Multiload 375
B.	Copper releasing IUD	II.	Progestogens
C.	Hormone releasing IUD	III.	Lippes loop
D.	Implants	IV.	LNG-20

Choose the correct answer from the option given below:

[NEET 2024]

Options:

A.

A-III, B-I, C-II, D-IV

B.

A-I, B-III, C-IV, D-II

C.

A-IV, B-I, C-II, D-III

D.

A-III, B-I, C-IV, D-II

Answer: D

Solution:

Correct answer is option (4) because

- Lippes loop is a non-medicated IUD.
- Multiload 375 is a copper releasing IUD.
- LNG -20 is a hormone releasing IUD.
- Progestogens are used as implants.

-----

## Question6

	List - I		List - II
(A)	Non-medicated IUDs	(I)	Multiload 375
(B)	Copper releasing IUDs	(II)	Rubber barrier
(C)	Hormone releasing IUDs	(III)	Lippes loop
(D)	Vaults	(IV)	LNG-20

**Choose the correct answer from the options given below:**

**[NEET 2023 mpr]**

**Options:**

- A.
- A-(IV), B-(III), C-(I), D-(II)
- B.
- A-(II), B-(IV), C-(III), D-(I)
- C.
- A-(III), B-(I), C-(IV), D-(II)
- D.
- A-(III), B-(IV), C-(II), D-(I)

**Answer: C**

**Solution:**

**Solution:**

(A) Non-medicated IUDs : These are intrauterine devices that do not release any copper or hormones. An example of this is the Lippes loop (III).

(B) Copper releasing IUDs : These IUDs gradually release copper, which has a spermicidal effect. Multiload 375 (I) is an example of this type of IUD.

(C) Hormone releasing IUDs : These IUDs release hormones to prevent pregnancy. LNG-20, also known as Mirena, (IV) is an example of this type of IUD.

(D) Vaults : This is another name for cervical caps, a type of barrier contraceptive method made of rubber (II).

-----

## Question7

**Given below are two statements :**

**Statement I :-**

**Intra Cytoplasmic Sperm Injection (ICSI) is another specialised procedure of in-vivo fertilisation.**

**Statement II :-**

**Infertility cases due to inability of the male partner to inseminate female can be corrected by artificial insemination (AI).**

**In the light of the above statements, choose the correct answer from the options given below:**

**[NEET 2023 mpr]**

**Options:**

A.

Statement I is correct but statement II is false

B.

Statement I is incorrect but Statement II is true

C.

Both Statement I and Statement II are true

D.

Both Statement I and Statement II are false.

**Answer: B**

**Solution:**

**Solution:**

**Statement I** is incorrect. Intra Cytoplasmic Sperm Injection (ICSI) is a specialized form of in-vitro (not in-vivo) fertilisation where a single sperm is injected directly into the egg to facilitate fertilisation. The fertilised egg (zygote) is then transferred to the woman's uterus.

**Statement II** is correct. Infertility cases due to inability of the male partner to inseminate the female can indeed be addressed through Artificial Insemination (AI). In AI, sperm (either from the woman's partner or a donor) is artificially inserted directly into the woman's cervix or uterus. This procedure can be used in cases where the male partner has low sperm count or poor sperm mobility, or if there are issues with sperm delivery.

## Question8

**Which of the following statements are correct?**

**(A) Reproductive health refers to total well-being in all aspects of reproduction.**

**(B) Amniocentesis is legally banned for sex determination in India.**

**(C) "Saheli" - a new oral contraceptive for females was developed in collaboration with ICMR (New Delhi).**

**(D) Amniocentesis is used to determine genetic disorders and survivability of foetus.**

**Choose the most appropriate answer from the options given below :**

## [NEET 2023 mpr]

### Options:

A.

(B) and (C) only

B.

(D) and (C) only

C.

(A), (B) and (D) only

D.

(A) and (C) only

**Answer: C**

### Solution:

#### Solution:

(A) Reproductive health refers to total well-being in all aspects of reproduction.

This statement is correct. Reproductive health does indeed refer to a total state of physical, mental, and social well-being in all matters relating to the reproductive system at all stages of life.

(B) Amniocentesis is legally banned for sex determination in India.

This statement is also correct. The use of amniocentesis for sex determination is indeed illegal in India, due to the misuse of the technique leading to female feticide. However, it is permitted for the detection of genetic abnormalities.

(C) "Saheli" - a new oral contraceptive for females was developed in collaboration with ICMR (New Delhi).

This statement is incorrect. Saheli was developed by the Central Drug Research Institute (CDRI), Lucknow, India, not ICMR.

(D) Amniocentesis is used to determine genetic disorders and survivability of fetus.

This statement is correct. Amniocentesis is a prenatal test that allows doctors to diagnose a wide range of genetic disorders by testing a small sample of the amniotic fluid surrounding the fetus.

---

## Question9

**Given below are two statements: one is labelled as Assertion A and other is labelled as Reason R.**

**Assertion A : Amniocentesis for sex determination is one of the strategies of Reproductive and Child Health Care Programme.**

**Reason R : Ban on amniocentesis checks increasing menace of female foeticide.**

**In the light of the above statements, choose the correct answer from the options given below.**

**[NEET 2023]**

### Options:

A. Both A and R are true and R is NOT the correct explanation of A.

B. A is true but R is false.

C. A is false but R is true.

D. Both A and R are true and R is the correct explanation of A.

**Answer: C**

**Solution:**

**Solution:**

The correct answer is option (3) as 'Reproductive and Child Health Care (RCH) programme' deals with creating awareness among people about various reproduction related aspects and providing facilities and support for building up a reproductively healthy society.

Amniocentesis is basically used to test for the presence of certain genetic disorders such as Down's syndrome, haemophilia, etc., to determine the survivability of the foetus.

Amniocentesis is not a sex determination technique in India and is not a strategy of RCH.

-----

## Question10

**Which one of the following common sexually transmitted diseases is completely curable when detected early and treated properly?  
[NEET 2023]**

**Options:**

A. Gonorrhoea

B. Hepatitis-B

C. HIV Infection

D. Genital herpes

**Answer: A**

**Solution:**

**Solution:**

The correct answer is option (1) because except for hepatitis-B, genital herpes and HIV infection other STIs are completely curable if detected early and treated properly.

Gonorrhoea is a bacterial disease which can be treated and cured completely, other diseases mentioned are viral diseases.

-----

## Question11

**Match List I with List II.**



List I	List II
A. Vasectomy	I. Oral method
B. Coitus interruptus	II. Barrier method
C. Cervical caps	III. Surgical method
D. Saheli	IV. Natural method

**Choose the correct answer from the options given below:  
[NEET 2023]**

**Options:**

- A. A-III, B-IV, C-II, D-I
- B. A-II, B-III, C-I, D-IV
- C. A-IV, B-II, C-I, D-III
- D. A-III, B-I, C-IV, D-II

**Answer: A**

**Solution:**

**Solution:**

Option (1) the correct answer because

- (i) Vasectomy is a surgical method of contraception
- (ii) Coitus interruptus is a natural method of contraception
- (iii) Cervical cap is a barrier method of contraception
- (iv) Saheli is an oral method of contraception which is a non-steroidal pill

## Question12

**Which of the following is not an Intra Uterine Device?  
[NEET Re-2022]**

**Options:**

- A. Progestasert

B. Progestogens

C. Multiload 375

D. Lippes loop

**Answer: B**

**Solution:**

**Solution:**

Intra Uterine Devices are presently available as the non-medicated IUDs (e.g. Lippes loop), copper releasing IUDs (CuT, Cu7, Multiload 375) and the hormone releasing IUDs (Progestasert, LNG-20).

---

## Question13

**IUDs are small objects made up of plastic or copper that are inserted in the uterine cavity.**

**Which of the following statements are correct about IUDs?**

- (a) IUDs decrease phagocytosis of sperm within the uterus.**
- (b) The released copper ions suppress the sperm motility. (c) IUDs do not make the cervix hostile to the sperm.**
- (d) IUDs suppress the fertilization capacity of sperm.**
- (e) The IUDs require surgical intervention for their insertion in the uterine cavity.**

**Choose the most appropriate answer from the options given below:  
[NEET Re-2022]**

**Options:**

- A. (d) only
- B. (a), (d) and (e) only
- C. (b) and (c) only
- D. (b) and (d) only

**Answer: D**

**Solution:**

**Solution:**

IUDs

- Inserted by doctors or expert nurses in the uterus through vagina. Increase phagocytosis of sperms within the uterus
  - Release Cu ions which suppress sperm motility & the fertilizing capacity of sperms
  - Make the uterus unsuitable for implantation & the cervix hostile to the sperms.
  - The IUDs require no surgical intervention for their insertion in the uterine cavity.
-

## Question14

**Lippe's loop is a type of contraceptive used as:  
[NEET-2022]**

**Options:**

- A. Cervical barrier
- B. Vault barrier
- C. Non-Medicated IUD
- D. Copper releasing IUD

**Answer: C**

**Solution:**

**Solution:**

Option (3) is the correct answer because the intrauterine device (IUD) presently available as the nonmedicated IUDs, is Lippe's loop.

Option (4) is incorrect as copper releasing IUDs are CuT, Cu7 and multiload 375.

Option (1) and (2) are incorrect as diaphragms, cervical caps and vaults are included in barrier method of contraception.

-----

## Question15

**Match List-I with List-II with respect to methods of Contraception and their respective actions**

List-I		List-II	
(a)	Diaphragms	(i)	Inhibit ovulation and Implantation
(b)	Contraceptive Pills	(ii)	Increase phagocytosis of sperm within Uterus
(c)	Intra Uterine Devices	(iii)	Absence of Menstrual cycle and ovulation following parturition
(d)	Lactational Amenorrhea	(iv)	They cover the cervix blocking the entry of sperms

**Choose the correct answer from the options given below:  
[NEET-2022]**

**Options:**

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

**Answer: B**

## Solution:

Option (2) is the correct answer because • Diaphragms are barrier methods of contraception. They cover the cervix and block the entry of sperms.

- Contraceptive pills are preparations containing either progestogens alone or combination of progestogen and oestrogen. They inhibit ovulation and implantation as well as alter the quality of cervical mucus to prevent entry of sperms.
  - Intra uterine devices increase the phagocytosis of sperms within the uterus.
  - Lactational amenorrhoea is a natural method of contraception and it is based on the fact that the ovulation and therefore menstrual cycle do not occur during the period of intense lactation following parturition.
- 

## Question16

**Which one of the following is an example of Hormone releasing IUD?  
[NEET 2021]**

**Options:**

- A. CuT
- B. LNG 20
- C. Cu 7
- D. Multiload 375

**Answer: B**

## Solution:

**Solution:**

- LNG-20 is a hormone releasing IUD which makes the uterus unsuitable for implantation and the cervix hostile to sperms.
  - Multiload 375, CuT and Cu7 are copper releasing IUDs which suppress sperm motility and the fertilizing capacity of sperms.
- 

## Question17

**Veneral diseases can spread through :**

- (a) Using unsterile needles**
- (b) Transfusion of blood from infected person**
- (c) Infected mother to foetus**
- (d) Kissing**
- (e) Inheritance**

**Choose the correct answer from the option given below  
[NEET 2021]**

**Options:**

- A. (a), (b) and (c) only
- B. (b), (c) and (d) only
- C. (b) and (c) only
- D. (a) and (c) only

**Answer: A**

**Solution:**

**Solution:**

- Venereal diseases or sexually transmitted diseases or infections are transmitted by sharing of infected needles, surgical instruments with infected person, transfusion of blood or from an infected mother to foetus.
- Venereal diseases are not transmitted through kissing or inheritance.

## Question 18

**Match List-I with List-II.**

	Column-I		Column-II
(a)	Vaults	(i)	Entry of sperm through Cervix is blocked
(b)	IUDs	(ii)	Removal of Vas deferens
(c)	Vasectomy	(iii)	Phagocytosis of sperms within the Uterus
(d)	Tubectomy	(iv)	Removal of fallopian tube

**Choose the correct answer from the option given below  
[NEET 2021]**

**Options:**

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

**Answer: B**

**Solution:**

- Diaphragms, cervical caps and vaults are barrier methods of contraception for female which works by blocking the entry of sperms through the cervix.

- IUDs increase phagocytosis of sperms within the uterus.
  - Vasectomy is a surgical method of contraception in males in which a small part of the vas deferens is removed or tied up through a small incision on the scrotum.
  - Tubectomy is a surgical method of contraception in females where a small part of the fallopian tube is removed or tied up through a small incision in the abdomen or through vagina.
- 

## Question19

**Select the option including all sexually transmitted diseases.  
[NEET-2020]**

**Options:**

- A. Gonorrhoea, Malaria, Genital herpes
- B. AIDS, Malaria, Filaria
- C. Cancer, AIDS, Syphilis
- D. Gonorrhoea, Syphilis, Genital herpes

**Answer: D**

**Solution:**

Gonorrhoea, Syphilis, Genital herpes are sexually transmitted diseases.

Gonorrhoea is caused by a bacterium *Neisseria gonorrhoeae*.

Syphilis is caused by a bacterium *Treponema pallidum*.

Genital herpes is caused by a virus Type-II-Herpes simplex virus.

---

## Question20

**In which of the following techniques, the embryos are transferred to assist those females who cannot conceive?  
[NEET-2020]**

**Options:**

- A. GIFT and ZIFT
- B. ICSI and ZIFT
- C. GIFT and ICSI
- D. ZIFT and IUT

**Answer: D**

**Solution:**

Option (4) is the answer because ART in which embryos are transferred, include ZIFT and IUT i.e. Zygote Intrafallopian Transfer and Intra Uterine Transfer respectively, both are embryo transfer (ET) methods.

Option (1), (2) and (3) are incorrect because in GIFT (Gamete Intrafallopian Transfer), gamete is transferred into the fallopian tube of female who cannot produce ova. ICSI is Intra cytoplasmic sperm injection in which sperm is directly injected into the ovum

---

## Question21

**Which of the following is a correct statement?  
[NEET OD 2019]**

©

**Options:**

- A. IUDs once inserted need not be replaced.
- B. IUDs are generally inserted by the user herself
- C. IUDs increase phagocytosis of sperms in the uterus.
- D. IUDs suppress gametogenesis.

**Answer: C**

---

## Question22

**Which of the following contraceptive methods do involve a role of hormone?  
[NEET 2019]**

**Options:**

- A. Barrier method, Lactational amenorrhea, Pills.
- B. CuT, Pills, Emergency contraceptives.
- C. Pills, Emergency contraceptives, Barrier methods.
- D. Lactational amenorrhea, Pills Emergency contraceptives.

**Answer: D**

**Solution:**

**Solution:**

→ In lactational amenorrhoea, due to high prolactin level, gonadotropin level decreases.

→ Oral pills are either progestogens or progestogen-estrogen combinations used by the females.

→ Emergency contraceptives include the administration of progestogens or progestogen-estrogen combination or IUDs within 72 hour of coitus.

So, lactational amenorrhoea, oral pills and emergency contraceptives involve a role of hormone.

---

## Question23

**Select the hormone-releasing Intra-Uterine Devices.  
[NEET 2019]**

**Options:**

- A. Multiload 375, Progestasert
- B. Progestasert, LNG-20
- C. Lippes Loop, Multiload 375
- D. Vaults, LNG-20

**Answer: B**

**Solution:**

**Solution:**

Progestasert and LNG-20 are hormone releasing IUDs which make the uterus unsuitable for implantation and the cervix hostile to sperms.

---

## Question24

**Which of the following sexually transmitted diseases do not specifically affect reproductive organs?  
[NEET OD 2019]**

©

**Options:**

- A. Genital warts and Hepatitis-B
- B. Syphilis and Genital herpes
- C. AIDS and Hepatitis B
- D. Chlamydiasis and AIDS

**Answer: C**

## Question25

**Which of the following sexually transmitted diseases is not completely curable?  
[NEET 2019]**

**Options:**

- A. Genital warts
- B. Genital herpes



C. Chlamydia

D. Gonorrhoea

**Answer: B**

**Solution:**

**Solution:**

Genital herpes is caused by type-II-herpes simplex virus. At present there is no cure for type-II-herpes simplex virus and therefore the disease caused, genital herpes. Other non- curable STIs are hepatitis-B and HIV.

-----

## Question26

**The contraceptive ‘SAHELI’  
[NEET 2018]**

**Options:**

A. blocks estrogen receptors in the uterus, preventing eggs from getting implanted

B. increases the concentration of estrogen and prevents ovulation in females

C. is a post-coital contraceptive

D. is an IUD

**Answer: A**

**Solution:**

**Solution:**

Saheli is the first non-steroidal, once a week pill. It contains centchroman and its functioning is based upon selective Estrogen Receptor modulation.

-----

## Question27

**Match the following sexually transmitted diseases (Column-I) with their causative agent (Column-II) and select the correct option :**

Column I	Column II
(a) Gonorrhea	(i) HIV
(b) Syphilis	(ii) Neisseria
(c) Genital Warts	(iii) Treponema
(d) AIDS	(iv) Human papilloma- Virus

**[NEET 2017]**

**Options:**

A. <sup>(a)</sup><sub>(iii)</sub> <sup>(b)</sup><sub>(iv)</sub> <sup>c</sup><sub>(i)</sub> <sup>(d)</sup><sub>(ii)</sub>

B. <sup>(a)</sup><sub>(iv)</sub> <sup>(b)</sup><sub>(ii)</sub> <sup>c</sup><sub>(iii)</sub> <sup>(d)</sup><sub>(i)</sub>

C. <sup>(a)</sup><sub>(iv)</sub> <sup>(b)</sup><sub>(iii)</sub> <sup>c</sup><sub>(ii)</sub> <sup>(d)</sup><sub>(i)</sub>

D. <sup>(a)</sup><sub>(ii)</sub> <sup>(b)</sup><sub>(iii)</sub> <sup>c</sup><sub>(iv)</sub> <sup>(d)</sup><sub>(i)</sub>

**Answer: D**

---

## Question28

**The function of copper ions in copper releasing IUD's is :  
[NEET 2017]**

**Options:**

A. They inhibit gametogenesis

B. They make uterus unsuitable for implantation

C. They inhibit ovulation

D. They suppress sperm motility and fertilising capacity of sperms

**Answer: D**

---

## Question29

**In case of a couple where the male is having a very low sperm count, which technique will be suitable for fertilisation ?**  
**[NEET 2017]**

**Options:**

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

**Answer: B**

---

## Question30

**Which of the following is hormonereleasing IUD?**  
**[NEET 2016 P2]**

**Options:**

- A. Cu7
- B. LNG-20
- C. Multilpad 375
- D. Lippes loop

**Answer: B**

**Solution:**

**Solution:**

LNG-20 is hormone releasing IUD clotting factors

---

## Question31

**Which of the following is incorrect regarding vasectomy?**  
**[NEET 2016 P2]**

**Options:**

- A. Irreversible sterility
- B. No sperm occurs in seminal fluid
- C. No sperm occurs in epididymis

D. Vasa deferentia is cut and tied

**Answer: C**

**Solution:**

In vasectomy, Vas deferens short segment is cut and tied.

Structure of male genital organ is :

- 1.. Testes- Spermatogenesis occurs.
2. Vas efferentia- Pierce the testes and enter into head of epididymis.
3. Epididymis- Sperm enter into head of it and stored into tail of it. It opens into vas deferens.

So, sperms first enter into epididymis then into vas deferens, through vas deferens it won't further enter into Ejaculatory duct as vas deferens has been cut.

-----

## Question 32

**Embryo with more than 16 blastomeres formed due to in vitro fertilization is transferred into  
[NEET 2016 P2]**

**Options:**

- A. cervix
- B. uterus
- C. fallopian tube
- D. fimbriae

**Answer: B**

**Solution:**

**Solution:**

The zygote or early embryo (upto 8 blastomeres stage) is transferred to fallopian tube called zygote intra fallopian transfer or ZIFT. IUT (Intrauterine transfer), the embryo with more than 8 blastomeres is transferred into the uterus. So, the correct answer is 'Uterus'.

-----

## Question 33

**Which of the following approaches does not give the defined action of contraceptive?  
[NEET 2016 P1]**

**Options:**

- A. Vasectomy → prevents spermatogenesis
- B. Barrier methods → prevent fertilization

C. Intra uterine devices →increase phagocytosis of sperms, suppress sperm motility and fertilizing capacity of sperms

D. Hormonal Contraceptives →Prevent/retard entry of sperms, prevent ovulation

**Answer: A**

**Solution:**

vasectomy causes sterilization by preventing transfer of sperms into semen

-----

## Question34

**In context of Amniocentesis, which of the following statement is incorrect ?**

**[NEET 2016 P1]**

**Options:**

A. It can be used for detection of Cleft palate.

B. It is usually done when a woman is between 14 -16 weeks pregnant.

C. It is used for prenatal sex determination.

D. It can be used for detection of Down syndrome.

**Answer: A**

**Solution:**

**Solution:**

Cleft palate is a structural defect and cannot be determined by amniocentesis.

-----

## Question35

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

**[NEET 2015]**

**Options:**

A. Gamete intra fallopian transfer

B. Gamete internal fertilization and transfer

C. Germ cell internal fallopian transfer

D. Gamete inseminated fallopian transfer

**Answer: A**

### **Solution:**

Gamete Intra Fallopian Transfer (GIFT) is an assisted reproductive technology in which both the sperm and unfertilised oocytes are transferred into the Fallopian tubes. Fertilisation takes place in vivo (inside the body of the female).

---

## **Question36**

**Which of the following is not a sexually transmitted disease ?  
[NEET 2015 C]**

### **Options:**

- A. Acquired Immuno Deficiency Syndrome(AIDS)
- B. Trichomoniasis
- C. Encephalitis
- D. Syphilis

**Answer: C**

---

## **Question37**

**Which of the following viruses is not transferred through semen of an infected male?  
[NEET 2015 C]**

### **Options:**

- A. Human immunodeficiency virus
- B. Chikungunya virus
- C. Ebola virus
- D. Hepatitis B virus

**Answer: B**

## Question38

**Tubectomy is method of sterilization in which:  
[NEET 2014]**

**Options:**

- 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

**Answer: A**

**Solution:**

**Solution:**

In tubectomy, small part of fallopian tube is removed or tied up.

---

## Question39

**Which of the following is a hormone releasing intra Uterine Device (IUD)?  
[NEET 2014]**

**Options:**

- A. Multiload 375
- B. LNG- 20
- C. Cervical cap
- D. Vault

**Answer: B**

**Solution:**

**Solution:**

LNG-20 is a hormone releasing intra-uterine device (IUD).

---

## Question40

**Assisted reproductive technology, IVF involves transfer of:  
[NEET 2014]**

©

**Options:**

- 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.

**Answer: B**

**Solution:**

**Solution:**

In IVF, zygote or the embryo upto 8-celled stage is transferred into the fallopian tube

-----

## Question41

**Artificial insemination means  
(NEET 2013)**

©

**Options:**

- 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 tube containing ova.

**Answer: A**

**Solution:**

**Solution:**

(a) : In artificial insemination technique, the semen of a healthy donor male is collected and is introduced artificially through a flexible polyethylene catheter into the vagina or into uterus called intrauterine insemination (IUI). Best results are obtained when the motile sperm count is more than 10 million. The fertilizing capacity of spermatozoa (sperms) is for 24 – 48 hours. The procedure may be repeated 2 3 times over a period of 2 – 3 days.

-----

## Question42



## One of the legal methods of birth control is (NEET 2013)

©

### Options:

- A. by having coitus at the time of day break
- B. by a premature ejaculation during coitus
- C. abortion by taking an appropriate medicine
- D. by abstaining from coitus from day 10 to 17 of the menstrual cycle.

**Answer: C**

### Solution:

#### Solution:

(c) : Intentional or voluntary termination of pregnancy by taking an appropriate medicine before full term is called medical termination of pregnancy (MTP) or induced abortion. Nearly 45 to 50 million MTPs are performed in a year all over the world which account to 1 / 5 th of the total number of conceived pregnancies in a year. MTP has a significant role in decreasing the population though it is not meant for that purpose. Government of India legalized MTP in 1971 with some strict conditions to avoid its misuse. Such restrictions are all the more important to check indiscriminate and illegal female foeticides.

-----

## Question43

**The stage transferred into the uterus after induced fertilization of ovum in the laboratory is (KN NEET 2013)**

©

### Options:

- A. embryo at 4 blastomeres stage
- B. embryo at 2 blastomeres stage
- C. morula
- D. zygote.

**Answer: C**

### Solution:

#### Solution:

(c) : Cleavage divisions produce a solid ball of cells called morula. It has 8 – 16 cells, occasionally 32 cells. It is transferred into uterus (IUT-Intra-uterine transfer) for further development.

-----

## Question44

**One of the following is not a method of contraception. Which one?  
(KN NEET 2013)**

©

**Options:**

- A. Condoms
- B. Pills of a combination of oxytocin and vasopressin
- C. Lippes loop
- D. Tubectomy

**Answer: B**

**Solution:**

(b) : Oxytocin is a birth hormone and vasopressin (anti-diuretic hormone) reabsorbs water from the renal tubules to conserve water in the body. They have no role in contraception.

-----

## Question45

**What is the figure given below showing in particular?**



**(2012)**

**Options:**

- A. Ovarian cancer
- B. Uterine cancer
- C. Tubectomy
- D. Vasectomy

**Answer: C**

**Solution:**

**Solution:**

(c) : Tubectomy involves blocking of the Fallopian tubes. The Fallopian tube are tied twice and cut between the knot. It prevents the sperms from reaching the ovum and thus prevents fertilization. It is a permanent method of sterilization.

-----

## Question46

**The test-tube baby programme employs which one of the following techniques?  
(2012)**

©

**Options:**

- A. Intra cytoplasmic sperm injection (ICSI)
- B. Intra uterine insemination (IUI)
- C. Gamete intra Fallopian transfer (GIFT)
- D. Zygote intra Fallopian transfer (ZIFT)

**Answer: D**

**Solution:**

**Solution:**

(d) : In in vitro fertilization method, popularly known as test tube baby programme, ova from the wife\donor (female) and sperms from the husband\ donor (male) are collected and are induced to form zygote under simulated conditions in the laboratory. The zygote or early embryos (with upto 8 blastomeres) could then be transferred into the Fallopian tube (ZIFT-zygote intra Fallopian transfer) and embryos with more than 8 blastomeres, into the uterus (IUI intra uterine transfer), to complete its further development.

-----

## Question47

**Which one of the following is the most widely accepted method of contraception in India at present?  
(2011)**

©

**Options:**

- A. Cervical caps
- B. Tubectomy
- C. Diaphragms
- D. IUDs (Intra uterine devices)

**Answer: D**

**Solution:**

**Solution:**

(d) : At present the most widely accepted method of contraception in India is JUDs. These Intra Uterine Devices (IUDs) are presently available as the nonmedicated IUDs (e.g., lippes loop), copper releasing IUDs (CuT, Cu7, Multiload 375) and the hormones releasing IUDs (Progestasert, LNG-20). IUDs increase phagocytosis of sperms within the uterus and the Cu-ions released suppress sperm motility and the fertilizing capacity of sperms. The hormone releasing IUDs make the uterus

unsuitable for implantation and cervix hostile to the sperms.

---

## Question48

**Medical Termination of Pregnancy (MTP) is considered safe up to how many weeks of pregnancy? (2011)**

**Options:**

- A. Eight weeks
- B. Twelve weeks
- C. Eighteen weeks
- D. Six weeks

**Answer: B**

**Solution:**

**Solution:**

(b) : Medical termination of pregnancy (MTP) or abortion is the termination of pregnancy before the foetus becomes viable. MTP is comparatively safe upto 12 weeks (the first trimester) of pregnancy. It becomes more risky after the first trimester period of pregnancy as the foetus becomes intimately associated with the maternal tissues.

---

## Question49

**The technique called Gamete Intra Fallopian Transfer (GIFT) is recommended for those females (Mains 2011)**

**Options:**

- A. who cannot produce an ovum
- B. who cannot retain the foetus inside uterus
- C. whose cervical canal is too narrow to allow passage for the sperms
- D. who cannot provide suitable environment for fertilization.

**Answer: A**

**Solution:**

**Solution:**

(a) : Gamete Intra Fallopian Transfer (GIFT) is transfer of an ovum collected from a donor into the Fallopian tube of another female who cannot produce ova but can provide proper environment for fertilization and further development.

## Question50

**In vitro fertilisation is a technique that involves transfer of which one of the following into the Fallopian tube? (2010)**

©

**Options:**

- 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

**Answer: B**

**Solution:**

**Solution:**

ZIFT ( Zygote Intrafallopian transfer) is a technique in which oocyte and sperms are taken and fertilization takes place outside the female's body i.e. in vitro. Early embryo with more than 8 blastomeres is transferred to the fallopian tube. So the correct option is ' Either zygote or early embryo upto 8 cell stage '.

-----

## Question51

**The permissible use of the technique amniocentesis is for (2010)**

©

**Options:**

- A. detecting sex of the unborn foetus
- B. artificial insemination
- C. transfer of embryo into the uterus of a surrogate mother
- D. detecting any genetic abnormality.

**Answer: D**

**Solution:**

**Solution:**

(d) : Amniocentesis is withdrawal of a sample of the fluid (amniotic fluid) surrounding a foetus in the uterus by piercing the amniotic sac through the abdominal wall, under direct ultrasound guidance. As the amniotic fluid contains cells from the foetus, cell cultures enable chromosome patterns to be studied so that prenatal diagnosis of chromosomal abnormalities can be made. Certain metabolic errors and other abnormalities, such as spina bifida, can also be diagnosed prenatally from analysis of the cells or of the fluid.

As this technique also helps in detection of sex of the unborn foetus, it has been banned in order to legally check increasing female foeticides.

---

## Question52

**Cu ions released from copper-releasing intra uterine devices (IUDs) (2010)**

©

**Options:**

- A. make uterus unsuitable for implantation
- B. increase phagocytosis of sperms
- C. suppress sperm motility
- D. prevent ovulation.

**Answer: C**

**Solution:**

**Solution:**

Cu ions release by copper-releasing intrauterine devices suppresses sperm motility. Intrauterine devices are inserted by doctors in the uterus through the vagina. They are available as the non-medicated IUDs, copper-releasing IUDs, and hormone-releasing IUDs, these IUDs increase phagocytosis of sperms within the uterus and the Cu ions suppress sperm's motility and fertilizing capacity.

So, the correct answer is 'Suppress sperm motility'

---

## Question53

**Consider the statements given below regarding contraception and answer as directed there after**

**(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) intrauterine devices like copper-T are effective contraceptives(4) contraception pills may be taken upto one week after coitus to prevent conception. Which two of the above statements are correct? (2008)**

**Options:**

- A. 1,3
- B. 1,2
- C. 2,3
- D. 3,4

**Answer: A**

## Solution:

### Solution:

(a) : Intrauterine devices like copper T are effective contraceptives for birth control. It suppresses sperm motility and the fertilising capacity of the sperm. Medical termination of pregnancy or induced abortion is voluntary or intentional termination of pregnancy before full term of foetus. It is comparatively safe upto 12 weeks (the first trimester) of pregnancy.

-----

## Question54

**Given below are four methods (A-D) and their modes of action (i-iv) in achieving contraception. Select their correct matching 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

**(2008)**

### Options:

- 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)

**Answer: C**

## Solution:

### Solution:

(c) : Pills also called contraceptive pills contain small doses of either progestogens or progestogenoestrogen combinations. They inhibit ovulation and implantation. Condoms are made of thin rubber/latex sheath used to cover the penis in the male or vagina and cervix in the female just before coitus so that the ejaculated semen is not released in the female reproductive tract, thus preventing sperms reaching cervix. In vasectomy, a small part of the vas deferens is removed or tied up through a small cut on the scrotum, thus blocking gamete (sperm) transport. However semen is a collection of secretions from the seminal vesicles, prostate gland, Cowper's gland and sperms from testes. So as the sperm is blocked semen is free of sperms. Copper T is an intrauterine device, which is inserted by doctors in the uterus through vagina. The copper ions released by them suppress sperm motility and also make the uterus unstable for implantation.

## Question55

**The formula for exponential population growth is (2006)**

©

**Options:**

A.  $\frac{dN}{dt} = rN$

B.  $\frac{dt}{dN} = rN$

C.  $\frac{dN}{rN} = dt$

D.  $\frac{rN}{dN} = dt$

**Answer: A**

**Solution:**

**Solution:**

(a) : Nearly all populations will tend to grow exponentially as long as there are resources available. The formula for exponential population growth is  $\frac{dN}{dt} = rN$ . In this equation  $d$  is the rate of change,  $N$  is the number of existing individuals,  $r$  is the intrinsic growth rate,  $t$  is time, and  $\frac{dN}{dt}$  is the rate of change in population size.

-----

## Question56

**Test tube baby means a baby born when (2003)**

©

**Options:**

A. it is developed in a test tube

B. it is developed through tissue culture method

C. the ovum is fertilized externally and thereafter implanted in the uterus

D. it develops from a non-fertilized uterus.

**Answer: C**

**Solution:**

**Solution:**

(c) : By in vitro fertilization, the ovum is fertilized with sperm outside the body of a woman, providing the ovum with the same environmental conditions as it would have got inside the uterus. The zygote is grown inside a culture and when embryo is formed, it is then implanted into uterus where it develops into foetus and then into a child. This is called test tube baby.

Methodology involves the following steps: Removal of unfertilised ovum from reproductive tract of a female.

- Ovum is kept under aseptic conditions.

- Fusion of sperm and ovum in a culture medium, outside the female body to form the zygote.



- Zygote is stimulated to develop in vitro upto 32 -celled stage.
- Developing embryo is implanted on the endometrium of the uterus at 32 -celled stage. So the pregnancy in the woman starts and further the development of the child continues in the womb till it is born.

---

## Question57

**Two opposite forces operate in the growth and development of every population. One of them is related to the ability to reproduce at a given rate. The force opposite to it is called (2003,1998)**

**Options:**

- A. fecundity
- B. environmental resistances
- C. biotic control
- D. mortality.

**Answer: B**

**Solution:**

**Solution:**

(b) : The environmental factors which can check the growth of population size constitute the environmental resistance. These include predators, food, water, nesting sites, similar competitors, etc. All living things tend to reproduce until the point at which their environment becomes a limiting factor. No population, human or otherwise, can grow indefinitely; eventually, some biotic or abiotic variable will begin to limit population growth.

---

## Question58

**In a population, unrestricted reproductive capacity is called as (2002)**

**Options:**

- A. biotic potential
- B. fertility rate
- C. carrying capacity
- D. birth rate.

**Answer: A**

**Solution:**

(a) : Biotic potential is defined as the physiological capacity of organisms to produce their offspring under natural conditions. It is also called reproductive potential. In nature, the biotic potential of organisms is enormous but all the organisms do not survive due to the lack of food and space. There are also a number of diseases and the predatory organisms, that feed upon other organisms. The carrying capacity is the maximum number of individuals which the environment can support or sustain.

---

## Question59

**What is the work of copper-T?  
(2000)**

©

**Options:**

- A. To inhibit ovulation
- B. To inhibit fertilization
- C. To inhibit implantation of blastocyst
- D. To inhibit gametogenesis

**Answer: B**

**Solution:**

**Solution:**

Copper T is also called 'intrauterine device (IUD)' and is a birth control device inserted into the uterine cavity by a doctor. It works by preventing a sperm from reaching the egg. Copper acts as a spermicide and thus kills the sperms. So, the correct answer is 'To prevent fertilization'.

---

## Question60

**What is the work of progesterone which is present in oral contraceptive pills?  
(2000)**

©

**Options:**

- A. To inhibit ovulation
- B. To check oogenesis
- C. To check entry of sperms into cervix and to make them inactive
- D. To check sexual behaviour

**Answer: A**

**Solution:**

(a) : Pills also called contraceptive pills contain small doses of either progestogens or progestogenoestrogen combinations. They inhibit ovulation and implantation.

---

## Question61

**Tablets to prevent male contraception contain (1999)**

**Options:**

- A. progesterone
- B. LH
- C. FSH
- D. both (b) and (c).

**Answer: D**

**Solution:**

**Solution:**

(d) : Male contraceptives work by interfering with sperm production or delivery, that means they inhibit the spermatogenesis as well as the function of male sex hormone testosterone. LH and FSH (both called gonadotropic hormone are secreted from anterior pituitary) have specific functions in the testis. FSH stimulates male germ cells for spermatogenesis and LH stimulates accessory cells, called Leydig cells to produce sex steroids, especially testosterone. Thus, these two hormones (FSH and LH) prevent male contraception.

---

## Question62

**The most important component of the oral contraceptive pills is (1998)**

**Options:**

- A. thyroxine
- B. luteinizing hormone
- C. progesterone
- D. growth hormone.

**Answer: C**

**Solution:**

**Solution:**

(c) : The most common type of pill is the so called "combined pill". It contains a combination of synthetic progestins

(acting like progesterone) and estrogen. Combined pills inhibit ovulation by inhibiting the normal release of FSH and LH from the pituitary. They mimic the hormones produced by the corpus luteum, causing the uterine walls to thicken, as during normal menstrual cycle, and suppressing the release of FSH and LH.

---

## Question63

**The present population of the world is about (1997)**

©

**Options:**

- A. 15 trillion
- B. 6 billion
- C. 500 million
- D. 100 million.

**Answer: B**

**Solution:**

**Solution:**

(b) : As this question appeared in 1997, so the population of world in mid 1997 was 5,840,324 , 240 i.e., approximately 6 billion.

---

## Question64

**Foetal sex can be determined by examining cells from the amniotic fluid by looking for (1997)**

©

**Options:**

- A. chiasmata
- B. kinetochore
- C. barr bodies
- D. autosomes.

**Answer: C**

**Solution:**

(c) : Barr body is a structure consisting of a condensed X chromosome that is found in nondividing nuclei of female mammals. Amniotic fluid contains foetal skin cells, that are stained to determine the presence of sex chromatin (barr

body). The presence of barr body indicates that the developing foetus is female with two X-chromosome.

---

## Question65

**The test tube baby means (1996)**

©

**Options:**

- A. fertilization and development both in uterus
- B. fertilization in vitro and then transplantation in uterus
- C. a baby grown in test tube
- D. fertilized and developed embryo in test tube.

**Answer: B**

---

## Question66

**In India, human population is heavily weighed towards the younger age groups as a result of (1995)**

**Options:**

- A. short life span of many individuals and high birth rate
- B. long life span of many individuals and high birth rate
- C. short life span of many individuals and low birth rate
- D. long life span of many individuals and low birth rate.

**Answer: A**

**Solution:**

**Solution:**

(a) : A population having mostly younger age group means its birth rate is high. If death rate is increased then the proportion of old age group will be increased. But in this case death rate has increasing trend thence in a human population which is heavily weighted towards the younger age groups, there will be short life span and high birth rate.

---

## Question67

**Which of the following statements is correct with reference to a test tube baby?  
(1994)**

**Options:**

- A. Fertilization of the egg is effected outside the body; the fertilized egg is then placed in the womb of the mother where the gestation is completed.
- B. Fertilization of the egg is effected in the female genital tract. It is then taken out and grown in a large test tube.
- C. A prematurely born baby is reared in an incubator.
- D. Fertilization of the egg and growth of the embryo are affected in a large test tube.

**Answer: A**

**Solution:**

In test tube baby or in vitro fertilisation technique, the ovum is fertilised with the sperm outside the body of a woman providing the ovum with the same environmental conditions as it would have got inside the uterus. The zygote formed is grown inside a culture and when embryo (having 8 or more blastomeres) is formed, it is then implanted into uterus where it develops into foetus. So, the correct answer is 'Fertilisation of the egg is completed outside the body, the fertilised egg is then placed in the womb of the mother where the gestation is completed'.

-----