

Reproductive Health

Chapter

26

FACT/DEFINITION TYPE QUESTIONS

- According to which of the following organization "reproductive health means a total well-being in all aspects of reproduction"?
(a) WHL (b) UNESCO
(c) WHO (d) WWW
- Which one amongst the following is the first country in the world to initiate action plans and programmes at a national level to attain total reproductive health as social goal?
(a) China (b) India
(c) Japan (d) USA
- The family planning programmes in India were initiated in
(a) 1951 (b) 1961
(c) 1971 (d) 1981
- RCH stands for
(a) Routine Check-up of Health
(b) Reproduction Cum Hygiene
(c) Reversible Contraceptive Hazards
(d) Reproductive and Child Health Care
- The technique which makes use of amniotic fluid for the detection of prenatal disorder is called as
(a) leproscopy (b) amniocentesis
(c) endoscopy (d) ultrasound
- 'Saheli' a new oral contraceptive developed by
(a) All Indian Institute of Medical Science
(b) Central Drug Research Institute
(c) Health Care Pvt. Ltd.
(d) Bharat Immunologicals & Biologicals corp. Ltd.
- What is the marriageable age for the females and males respectively in India?
(a) 18, 18 (b) 18, 25
(c) 21, 18 (d) 18, 21
- Which of the following is traditional method of contraception?
(a) Implantation
(b) Lactational amenorrhoea
(c) Condoms
(d) Sterilization
- Which of the following contraceptive also provides protection from contracting STDs and AIDS ?
(a) Diaphragms
(b) Spermicidal foams
(c) Condoms
(d) Lactational amenorrhoea
- The diaphragm, cervical cap and vaults are
(a) disposable contraceptive devices
(b) Reusable contraceptives
(c) Non-medicated IUDs
(d) Cu-releasing IUDs
- Which of the following groups of contraceptives are included under barrier methods?
(a) Condom, Vaults, IUDs, Cervical caps
(b) IUDs, Diaphragm, Abstinence, Injections
(c) Condom, Diaphragm, Cervical caps, Vaults
(d) Surgical methods, Oral contraceptives, Cervical caps, vaults
- IUDs stands for
(a) Intra Uterine Devices
(b) Internal Uterine Devices
(c) Inseminated Uterine Devices
(d) Injected Uterine Devices
- Which of the following ions plays an effective role in the activity of IUDs?
(a) Iron (b) Zinc
(c) Copper (d) Ammonium
- Which of the following contraceptives is one of the most widely accepted method of contraception in India?
(a) Sterilization
(b) Intra Uterine device
(c) Withdrawal or coitus interruption
(d) Medical termination of pregnancy

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15. Progestasert and LNG-20 are
 - (a) implants
 - (b) copper releasing IUDs
 - (c) non-medicated IUDs
 - (d) hormone releasing IUDs
16. The most important component of the oral contraceptive pills is
 - (a) progesterone
 - (b) growth hormone
 - (c) thyroxine
 - (d) luteinizing hormone
17. Tying up or removing a small part of fallopian duct is called
 - (a) vasectomy
 - (b) ductus arteriosus
 - (c) archidectomy
 - (d) tubectomy
18. In which year, MTP was legalised in India?
 - (a) 1971
 - (b) 1951
 - (c) 1981
 - (d) 1923
19. MTPs are considered relatively safe during the _____ weeks of pregnancy.
 - (a) 12
 - (b) 15
 - (c) 18
 - (d) 20
20. STD/VD/UTI are
 - (a) devices which are used to delay the pregnancy.
 - (b) infections which are caused by food contamination.
 - (c) diseases which are transmitted through sexual intercourse.
 - (d) action plans and programmes to create awareness about various reproductive related health and problems.
21. Hepatitis B is transmitted through
 - (a) blood transfusion
 - (b) intimate physical contact
 - (c) Sexual contact
 - (d) All of these
22. World AIDS day is
 - (a) December 21
 - (b) December 1
 - (c) November 1
 - (d) June 11
23. To form embryo in *vitro*, the male gamete is transferred into female gamete directly. Such technique is called _____.
 - (a) IUI
 - (b) IUT
 - (c) ICSI
 - (d) GIFT
24. The transfer of zygote or early embryo (up to 8 blastomeres) into fallopian tube is called _____.
 - (a) IVF and ET
 - (b) ZIFT
 - (c) GIFT
 - (d) IUT
25. The Test-tube Baby Programme employs which one of the following techniques?
 - (a) Intra Cytoplasmic Sperm Injection (ICSI)
 - (b) Intra Uterine Insemination (IUI)
 - (c) Gamete Intra Fallopian Transfer (GIFT)
 - (d) Zygote Intra Fallopian Transfer (ZIFT)
26. Artificial insemination mean
 - (a) transfer of sperms of husband to a test tube containing ova.
 - (b) artificial introduction of sperms of a healthy donor into the vagina.
 - (c) introduction of sperms of a healthy donor directly into the ovary.
 - (d) transfer of sperms of a healthy donor to a test tube containing ova.
27. The technique called gamete intra fallopian transfer (GIFT) is recommended for those females
 - (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.

STATEMENT TYPE QUESTIONS

28. Which of the following statement is **incorrect**?
 - (a) According to 2001 census our population growth rate was 1.7%.
 - (b) Marriageable age for male and female is respectively 18 and 21 years.
 - (c) An ideal contraceptive should be reversible.
 - (d) The problem of infertility in India lies most often in female partner.
29. Which of the following statement regarding natural methods of contraception is true?
 - (a) They increase phagocytosis of sperms.
 - (b) They employ barriers to prevent fertilization.
 - (c) They are the natural ways of avoiding chances of fertilization.
 - (d) They are surgical and terminal methods.
30. Which one of the following statements is correct regarding Sexually Transmitted Diseases (STD)?
 - (a) The chances of a 5 year boy contacting a STD are very little.
 - (b) A person may contact syphilis by sharing milk with the one who is already suffering from the same disease.
 - (c) Haemophilia is one of the STD.
 - (d) Genital herpes and sickle-cell anaemia are both STD.
31. Read the following statements and mark the correct option
 - (i) MTP was legalized in 1971.
 - (ii) Inability to conceive or produce children even after 2 years of unprotected sexual cohabitation is called infertility.
 - (iii) Surgical method of contraception prevents gamete formation.
 - (iv) MTPs are relatively safe up to 14 weeks of pregnancy.
 - (a) (i) and (ii)
 - (b) (ii) and (iii)
 - (c) (iii) and (iv)
 - (d) (i) and (iii)

32. Choose the correct statements given below regarding contraception.
- Medical Termination of Pregnancy (MTP) during first trimester is generally safe.
 - Generally chances of conception are nil until mother breast-feeds the infant upto two years.
 - Intrauterine devices like copper-T are effective contraceptives.
 - Contraception pills may be taken upto one week after coitus to prevent conception.
- (a) (i) and (ii) (b) (ii) and (iii)
(c) (iii) and (iv) (d) (i) and (iii)
33. What is true for an ideal contraceptive ?
- It should be user-friendly.
 - It should be easily available.
 - It should be ineffective and reversible with least side effects.
 - It should be effective and reversible with least side effects.
 - It should interfere with the sexual act of the user.
- (a) All of these (b) (i), (ii) and (iii)
(c) (i), (ii) and (iv) (d) (i), (ii), (iv) and (v)
34. Which of the following statement are correct?
- Purpose of tubectomy is to prevent egg formation.
 - The most important component of the oral contraceptive pills is progesterone.
 - Contraceptive oral pills help in birth control by preventing ovulation.
 - Genital warts is a sexually transmitted disease caused by herpes virus.
 - In India, there is rapid decline in infant mortality rate and maternal mortality rate.
- (a) (i), (ii) and (iii) (b) (ii), (iii) and (v)
(c) (iii), (iv) and (v) (d) (iv), (v) and (vi)
35. Choose the correct statements –
- According to the WHO, reproductive health is total well-being in the physical, social, emotional, behavioural aspects of reproduction.
 - According to the WHO, reproductive health is total well being in the physical, social and emotional aspects of reproduction.
 - A reproductively healthy society has people with physically and functionally normal reproductive organs.
 - Reproductively healthy societies have abnormal sex-related emotional and behavioural interactions.
- (a) (i), (ii) and (iii) (b) (ii) and (iv)
(c) (i) and (iii) (d) (i) only
36. Reproductive health in society can be improved by
- Introduction of sex education in schools.
 - Increased medical assistance.
 - Awareness about contraception and STDs.
 - Equal opportunities to male and female child.
 - Ban on aminocentesis.
 - Encouraging myths and misconceptions.
- (a) All of these (b) (i), (ii), (iv) and (vi)
(c) (i), (ii), (iii), (iv) and (v) (d) (ii) and (v)
37. Identify the **incorrect** statements and select the correct option.
- Birth control pills are likely to cause cardiovascular problems.
 - A woman who substitutes or takes the place of the real mother to nurse the embryo is called surrogate mother
 - Numerous children have been produced by in vitro fertilization but with some abnormalities.
 - Woman plays a key role in the continuity of the family and human species
 - Foetal sex determination test should not be banned.
- (a) (i) and (ii) (b) (ii) and (iv)
(c) (iii) and (v) (d) None of these
38. Which of the following are the reasons for population explosion?
- Increased health facilities
 - Rapid increase in MMR
 - Rapid increase in IMR
 - Rapid decrease in MMR
 - Decrease in number of people reaching reproductive age
- (a) (i) and (iv) (b) (iii) and (v)
(c) (ii) and (iv) (d) (i) and (v)
39. To avoid transmission of STDs, we should
- Avoid sex with multiple partners.
 - Always have unprotected sex.
 - Use condoms during coitus.
 - Avoid sex with unknown partners.
 - Avoid sharing of needles.
- (a) (i), (ii), (iii) and (v)
(b) (i), (iii), (iv) and (v)
(c) (i), (ii) and (iii)
(d) (i), (ii) and (iv)
40. Identify the **incorrect** statement regarding ZIFT.
- ZIFT is zygote intra fallopian transfer.
 - It is one of the techniques known as assisted reproductive technologies.
 - Through this process embryo is formed by injecting ovum into the sperm.
 - Zygote or embryo up to 8 blastomeres is collected and transferred into the fallopian tube.
41. Which of the following statements regarding IUDs is correct?
- It suppresses the process of gametogenesis.
 - They once inserted need not be replaced.
 - They are generally inserted by the user itself.
 - It increases phagocytosis of sperms within the uterus.

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42. Select the correct statements regarding diaphragm as contraceptive device from the given options.
- They act as physical barrier for sperm entry.
 - They are placed to cover the cervical region during coitus.
 - They are introduced into the uterus to prevent implantation.
 - They act as spermicidal agents to increase their contraceptive effectiveness
- (i), (ii) only
 - (i), (iv) only
 - (ii), (iii) only
 - (iii), (iv) only
43. Identify the correct function(s) of pills
- Inhibit ovulation and implantation.
 - Alter the quality of cervical mucus to prevent or retard the entry of sperms.
 - Prevent the ejaculated semen from entering the female vagina.
 - Inhibit spermatogenesis.
- (i), (ii) and (iii)
 - (i) and (ii)
 - (ii), (iii) and (iv)
 - (iii) and (iv)
44. Select the correct statements regarding MTP from the given options.
- Always surgical.
 - Used as a contraceptive method.
 - Generally suggested during first trimester.
- (i) only
 - (i), (ii) only
 - (i), (iii) only
 - All of these.

ASSERTION/REASON TYPE QUESTIONS

In the following questions, a statement of Assertion is followed by a statement of Reason.

- If both Assertion and Reason are true and the Reason is the correct explanation of the Assertion.
 - If both Assertion and Reason are true but the Reason is not the correct explanation of the Assertion.
 - If Assertion is true but Reason is false.
 - If both Assertion and Reason are false.
45. **Assertion :** Mother would be blamed for the birth of the girls in the family.
Reason : Father is not responsible for the sex of the child.
46. **Assertion :** Amniocentesis is often misused.
Reason : Amniocentesis is meant for determining the genetic disorders in the foetus, but it is being used to determine the sex of the foetus, to kill the normal female foetus.
47. **Assertion :** Over-population has become a serious problem in the developing countries.
Reason : It does not exhaust natural resources, causes unemployment and pollution.
48. **Assertion :** Cu-T and Cu-7 do not suppresses sperm-motility.
Reason : Hormones released by them affect sperm motility.

49. **Assertion :** Copper-T is an effective contraceptive device in human females.

Reason: Copper-T prevents passage of sperms from vagina upwards into Fallopian tubes.

MATCHING TYPE QUESTIONS

50. Given below are four methods (A-D) of contraceptive in column-I and their modes of action in achieving contraception in column-II. Match the columns and select the correct option :

Column -I

(Method)

- The contraceptive pill
- Condom
- Vasectomy
- Copper T

Column -II

(Mode of Action)

- Prevents sperms reaching cervix
- Prevents implantation
- Prevents ovulation
- Semen contains no sperms

- A – II; B – III; C – I; D – IV
- A – III; B – I; C – IV; D – II
- A – IV; B – I; C – II; D – III
- A – III; B – IV; C – I; D – II

51. Column I contains different types of IUD's with their examples given in column II. Match the column and choose the correct option

Column-I

- Non-medicated IUDs
- Hormone releasing IUDs
- Copper releasing IUDs

Column-II

- Lippes loop
- Multiload 375
- CuT
- Cu7
- LNG-20
- Progestasert

- A – I; B – II; VI; C – III; IV; V
- A – I; B – V; VI; C – II; III; IV
- A – II; B – III; VI; C – I; V; IV
- A – II; B – I; VI; C – III; IV; V

52. Match the column I with column II and choose the correct option

Column-I

- Hepatitis B
- Saheli
- Normal functioning of reproductive organs
- World Health organisation
- ELISA technique

Column-II

- Vitamin E
- 7th April, 1948
- CDRI, Lucknow
- Detection of antibody/antigen
- Hepatitis B virus

- A – V; B – III; C – I; D – II; E – IV
- A – V; B – II; C – I; D – III; E – IV
- A – V; B – III; C – IV; D – II; E – I
- A – V; B – II; C – IV; D – III; E – I

53. Select the correct match of the techniques given in column I with its feature given in column II.

	Column I		Column II
A.	ICSI	I	Artificially introduction of semen into the vagina or uterus.
B.	IUI	II	Transfer of ovum collected from a donor into the fallopian tube where fertilization
C.	IUT	III	Formation of embryo by directly injecting sperm into the ovum
D.	GIFT	IV	Transfer of the zygote or early embryo (with upto 8 blastomeres) into a fallopian
E.	ZIFT	V	Transfer of embryo with more than 8 blastomeres into the uterus

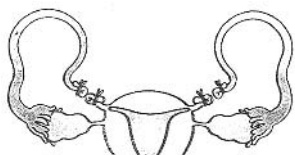
- (a) A – V; B – IV; C – I; D – III; E – IV
 (b) A – I; B – II; C – III; D – IV; E – V
 (c) A – III; B – V; C – II; D – IV; E – I
 (d) A – III; B – I; C – V; D – II; E – IV

54. Select the correct match from the given option.

- (a) Non Medicated IUDs - Multiload 375
 (b) Saheli - Contains a non - steroidal preparation
 (c) Lactational amenorrhea - Presence of menstruation
 (d) Diaphragms, cervical caps, vaults - Cover the cervix after the coitus is done

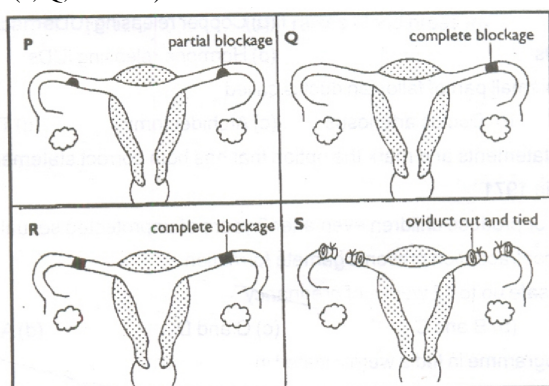
DIAGRAM TYPE QUESTIONS

55. The process done in the given figure



- (a) Prevents egg from reaching the uterus for implantation.
 (b) Avoid insemination
 (c) Inhibits ovulation
 (d) Increases contraceptive efficiency

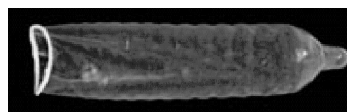
56. The given diagram shows the uterine tubes of four women (P, Q, R and S).



In which two women is fertilization impossible at present ?

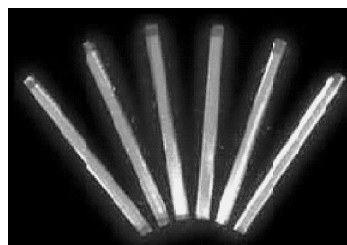
- (a) P and Q
 (b) Q and R
 (c) R and S
 (d) S and P

57. Identify the figure given below.



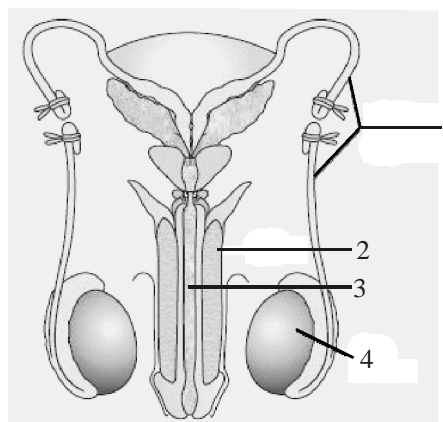
- (a) Male condom
 (b) Female condom
 (c) Norplant
 (d) Copper T

58. Which of the following option is correct regarding the diagram given below?



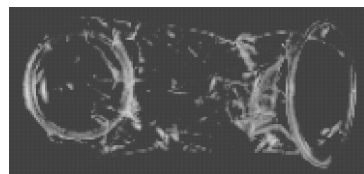
- (a) It is a device made of rubber and inserted into the female reproductive tract to cover the cervix during coitus.
 (b) It is a device made of thin rubber/ latex sheath and are used to cover penis in the male.
 (c) This device is inserted by doctors in the uterus through vagina and increases phagocytosis of sperms within the uterus.
 (d) It is a set of 6-small plastic capsules (called implant) which are placed under the skin of a women's upper arm and it prevent pregnancy.

59. In the given figure which marked number (1, 2, 3, 4) is tied and cut to block fertilization



- (a) 1
 (b) 2
 (c) 3
 (d) 4

60. Refer the given figure below and answer the question. Which feature is correctly associated with the given figure?



- (a) It is a male condom which is used to cover the penis just before the coitus to prevent the entry of ejaculated semen into the female reproductive tract.
- (b) It is a female condom which is used to cover the cervix and vagina just before the coitus.
- (c) It is a condom which is used to cover penis in male and vagina and cervix in female.
- (d) It is one type of IUDs which makes the uterus unsuitable for implantation and cervix hostile to the sperms.
61. The given figure shows one of the elements releasing intrauterine device. Select the option which shows the correct identification of the device and its feature.



- (a) CuT; suppress sperm motility and its fertilizing capacity.
- (b) Cu7; make uterus unsuitable for the attachment of blastocysts.
- (c) Lippes loop; protect the users from contracting AIDS and STDs.
- (d) LNG - 20; acts as spermicidal means and decrease the contraceptive efficiency.

CRITICAL THINKING TYPE QUESTIONS

62. On which days of the menstrual cycle is ovulation expected?
- (a) 10th - 30th (b) 1st - 10th
- (c) 10th - 17th (d) 18th - 25th
63. Refer the following statement and answer the question. "Inability of an individual to inseminate the female or due to very low sperm counts in ejaculates leads to "A". It could be corrected by "B". In "B" the "C" is collected and artificially introduced either into the vagina or into the "D" (IUI - intra-uterine insemination) of the female." Identify A to D.

	A	B	C	D
a.	STD	Embryo transfer	Urine	Fallopian tube
b.	MTP	GIFT	Ovum	Uterus
c.	Infertility	Artificial technique	Semen	Uterus
d.	Infertility	ZIFT	Sperm	Fallopian tube

64. Which of the following disease is completely curable if detected early and treated properly?
- (a) Syphilis (b) Hepatitis B
- (c) Genital herpes (d) HIV infection
65. Present increase in India's population has not been due to decline in
- (a) decrease in infant mortality rate
- (b) decrease number of people reaching reproductive age
- (c) decline in death rate
- (d) decline in maternal mortality rate
66. The copper ions of IUDs
- (a) suppress the motility and fertilization capacity of sperms.
- (b) make the uterus unsuitable for implantation.
- (c) increase phagocytosis of sperms.
- (d) make cervix hostile to sperms.
67. Progestogens in the contraceptive pill
- (a) prevents ovulation
- (b) inhibits estrogen
- (c) checks attachment of zygote endometrium
- (d) All of the above
68. Which of the following birth control measures can be considered as the safest?
- (a) The rhythm method
- (b) The use of physical barriers
- (c) Termination of unwanted pregnancy
- (d) Sterilization techniques
69. The success of birth control programmes in controlling population growth is dependent on
- (a) use of contraceptives
- (b) tubectomy
- (c) vasectomy
- (d) acceptability of the above by the people
70. Assisted reproductive technologies (ART)
- (a) include social awareness programmes to educate people about reproductive health and diseases.
- (b) include research organization working on to produce new and more effective contraceptives for birth control.
- (c) include a number of special techniques which assist infertile couples to have children.
- (d) both (b) and (c)
71. Which of the following STDs are not completely curable?
- (a) Chlamydia, gonorrhoea, trichomoniasis
- (b) Chancroid, syphilis, genital warts
- (c) AIDS, syphilis, hepatitis B
- (d) AIDS, genital herpes, hepatitis B
72. Intensely lactating mothers do not generally conceive due to the
- (a) suppression of gonadotropins.
- (b) hypersecretion of gonadotropins.
- (c) suppression of gametic transport.
- (d) suppression of fertilization.

73. The best way to control population of a country is
 (a) to educate people.
 (b) to have better houses.
 (c) to kill people on a large scale.
 (d) to practice and implement family planning.
74. Which of the following is correct regarding the consequences of over population?
 (a) It increase the poverty of a country.
 (b) It leads to shortage of food supply.
 (c) It results in unemployment.
 (d) All of the above.
75. An individual undergoes sterilization process in which a small incision was done on "X" and a part of vas deferens is removed or tied up.
 Identify "X" and the intervention of this surgical process.
 (a) "X" - Fallopian tube; Prevent ovulation and implantation.
 (b) "X" - Testes; Prevent conception by blocking sperm entry.
 (c) "X" - Epididymis; Inhibit maturation of sperm and its transport.
 (d) "X" - Scrotum; Gamete transport is blocked and thereby prevents conception.
76. It is a disease which mainly affects mucous membrane of urinogenital tract, In males burning feeling on passing urine after a yellow discharge occurs that is accompanied by fever headache and feeling of illness its name is
 (a) Phenylketonuria (b) Gonorrhoea
 (c) AIDS (d) None of these
77. Emergency contraceptives are effective if used within
 (a) 72 hours of coitus
 (b) 72 hours of ovulation
 (c) 72 hours of menstruation
 (d) 72 hours of implantation
78. Identify the type of most popular contraceptive device whose features are given below.
 (i) They do not interfere the act of coitus.
 (ii) These are effective barriers for insemination.
 (iii) These help in reducing the risk of sexually transmitted diseases.
 (a) IUD (b) Condom
 (c) Injectable (d) Oral contraceptives
79. Study the given reasons on the basis of which pregnancy can be terminated. Identify the correct reasons.
 (i) To get rid of unwanted pregnancies.
 (ii) To prevent the fatality or harmfulness to the mother or to foetus or both due to the continuation of pregnancy.
 (iii) Termination of pregnancy is safe in each and every case.
 (iv) If the foetus is male.
 (v) It plays an important role in decreasing the population.
- (a) (i), (ii), only (b) (ii), (iii) only
 (c) (iii), (iv), (v) only (d) All of these
80. Given below are some examples of sexually transmitted diseases. Identify the one or more which specifically affect the sex organs.
 (i) AIDS (ii) Syphilis
 (iii) Gonorrhea (iv) Genital warts
 (a) (i) only (b) (i), (ii) only
 (c) (ii), (iii), (iv) only (d) All of these.
81. Which of the following principle will not help people to become free from the infection of sexually transmitted diseases?
 (i) Always use condoms in the course of coitus.
 (ii) Avoid sex with unknown partners/multiple partners
 (iii) Refer any one in case of doubt for early detection and diagnose of disease and get complete treatment.
 (iv) In case of doubt, go to a qualified doctor for early detection and get complete treatment if diagnosed with disease.
 (v) Involvement in sex with known partners/single partners
 (a) (i), (iv) only (b) (i), (ii), (iii) only
 (c) (i), (ii), (iv) only (d) All of these.
82. Which of the following infections can also be transmitted by sharing of injection needles, surgical instruments, etc., with infected persons, transfusion of blood, or from an infected mother to the foetus too?
 (a) Hepatitis B and HIV
 (b) Genital herpes and HIV
 (c) Syphilis and Hepatitis B
 (d) Chlamydia and Trichomoniasis
83. Identify the correct reasons of infertility.
 (i) Drugs
 (ii) Diseases
 (iii) Congenital
 (iv) Use of Contraceptives
 (v) Immunological or psychological
 (vi) Assisted reproductive technology
 (a) (i), (ii), (iii) (b) (iii), (iv), (vi)
 (c) (i), (ii), (iii), (v) (d) All of these
84. Which of the following assisted reproductive technology has been used for the longest time period?
 (a) *In vitro* fertilization
 (b) Artificial insemination
 (c) Intracytoplasmic sperm injection
 (d) Gamete intra fallopian transfer
85. Amniocentesis is a technique used to
 (a) determine errors in amino acid metabolism in embryo
 (b) pin point specific cardiac ailments in embryo
 (c) determine any hereditary genetic abnormality in embryo
 (d) All of these

Hints & Solutions

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1. (c) The World Health Organization (WHO) is a specialized agency of the United Nations (UN) that is concerned with international public health. It was established on 7 April 1948, headquartered in Geneva, Switzerland.
2. (b) India is the first country to initiate action plans and programmes at a national level to aware people of the issues of reproductive health and made it one of the social issues to be tackled with good efforts.
3. (a) The programmes called 'family planning' for reproductive health awareness were initiated in 1951.
4. (d) Reproduction-related areas are currently in operation in India come under the popular name 'Reproductive and Child Health Care (RCH) programmes.
5. (b) Amniocentesis or amniotic fluid test or AFT is a medical procedure which is used in prenatal diagnosis of chromosomal abnormalities and foetal infections. This is the same procedure used for sex determination.
6. (b) 'Saheli'—an oral contraceptive for the females was developed at Central Drug Research Institute (CDRI) in Lucknow, India.
7. (d) Marriageable age is the age at which a person is allowed by law to marry. In India this age has been set as 18 for woman and 21 for man (without parents' consent).
8. (b) Lactational amenorrhoea is the absence of menstruation. It is the breast sucking of mother by her child for a long time which is considered to contribute a gap for pregnancy. It is based on the fact that ovulation and the menses do not occur during the period of intense lactation following parturition.
9. (c) The use of condoms during coitus is some of the simple precautions to avoid contacting STDs like AIDS and syphilis.
10. (b) Diaphragms, cervical caps and vaults are reusable barrier contraceptives made of rubber that are inserted into the female reproductive tract to cover the cervix during coitus. They prevent conception by blocking the entry of sperms through the cervix.
11. (c) Condom, diaphragm, cervical caps, and vaults are included under barrier methods of contraception.
12. (a) IUDs stand for Intra Uterine Devices. These are plastic or metal devices placed in the uterus. They contain either copper or a common synthetic hormone used in oral contraceptives. These include loop, copper-T, spiral etc. They prevent fertilization of the egg or implantation of egg.
13. (c) Copper ions play an important and effective role in the activity of IUDs. Copper IUDs primarily work by disrupting sperm mobility and damaging sperm so that they are prevented to take part in the process of fertilization. The increased copper ions in the cervical mucus inhibit the sperm's motility and viability, preventing sperm from traveling through the cervical mucus or destroying it as it passes through.
14. (b) Intra uterine device, the most widely accepted method of contraception in India, is a method of birth control. It is designed for insertion into a woman's uterus so that changes occur in the uterus that makes it difficult for fertilization of an egg and implantation of a pregnancy. IUDs also have been referred to as "intra uterine contraception (IUC).
15. (d) The hormone releasing Intra Uterine Devices (IUDs) such as Progestasert and LNG-20 increase phagocytosis of sperms within the uterus and makes the uterus unsuitable for implantation & the cervix hostile to the sperms.
16. (a) Oral administration of small doses of either progestogens or progestogen-estrogen combinations (in the form of pills) is one of the contraceptive methods used by the females.
17. (d) Female sterilization (called **tubectomy**) prevents fertilization by interrupting the passage through fallopian tube. Eggs continue to be produced but they fail to pass into the uterus. In tubectomy, a small part of the fallopian tube is removed or tied up through a small incision in the abdomen or through vagina.
18. (a) Medical Termination of Pregnancy (MTP) was legalised in 1971 by Government of India with some strict conditions to avoid its misuse.
19. (a) MTP is the intentional or voluntary termination of pregnancy before term. MTPs are considered relatively safe during the first trimester, i.e., up to 12 weeks of pregnancy.

20. (c) Sexually transmitted diseases (STDs) are caused by infections that are passed from one person to another during sexual contact. Most STDs initially do not cause symptoms. Symptoms and signs of disease may include: vaginal discharge, penile discharge, ulcers on or around the genitals, and pelvic pain.
21. (d) 22. (b)
23. (c) Intra cytoplasmic sperm injection (ICSI) is an *in-vitro* fertilization procedure in which a single sperm is injected directly into an egg. This procedure is most commonly used to overcome male infertility problems, although it may also be used where eggs cannot easily be penetrated by sperm, and occasionally in addition to sperm donation.
24. (b) ZIFT (Zygote intra fallopian transfer) is the process in which the zygote or early embryos (with upto 8 blastomeres) is transferred into the fallopian tube.
25. (d) Test tube baby programme employs zygote intra fallopian transfer (ZIFT) technique. In this technique fusion of ovum and sperm is done outside the body of woman to form zygote which is allowed to divide forming 8 blastomeres, then it is transferred into the fallopian tube of the woman.
26. (b) In artificial insemination (AI) technique, the semen collected either from the husband or a healthy donor is artificially introduced either into the vagina or into the uterus (IUI – intrauterine insemination) of the female.
27. (a) Gamete Intra fallopian Transfer (GIFT) is recommended for those females who cannot produce an ovum. In this process, the eggs of the donor woman are removed and in a form of mixture with sperm transferred into fallopian tube of another woman who cannot produce ovum, but can provide suitable environment for fertilization. Thus in GIFT, site of fertilization is fallopian tube, not laboratory.
28. (d) Infertility problems cannot be generalised. It is a false statement to say that in India the infertility problems lie in females more often.
29. (c) Natural method of contraception works on the principle of avoiding chances of ovum and sperm meeting. include periodic abstinence, coitus interrupts and lactational ammenorrhea.
30. (a) STDs are those infections or diseases which are transmitted through sexual intercourse. STDs are more common in 15-24 years age group. Gonorrhoea, syphilis, genital herpes, chlamydia, genital warts, trichomoniasis, hepatitis-B and AIDS are some of the common STDs. Haemophilia is a sex-linked recessive disease, which shows its transmission from unaffected carrier female to some of male progeny. Sickle cell anaemia is an autoimmune linked recessive trait in which both the partners are carrier for the gene.
31. (a) Surgical methods of contraception are generally advised for male/female partner to prevent any more pregnancies. It blocks gametes transport and thereby prevent conception. MTPs are relatively upto first trimester i.e. first three months of the pregnancy.
32. (d) Contraceptive pills have to be taken daily for a period of 21 days starting preferably within the first five days of menstrual cycle. It helps in the prevention of conception. As long as the mother feeds breast the child fully, chances of conception are almost nil only up to a maximum period of six months following parturition.
33. (c) An ideal contraceptive should be user-friendly, easily available, effective and reversible with no or least side-effects.
34. (b) Purpose of tubectomy is to prevent the gamete transport. Genital warts are a sexually transmitted disease, caused by some types of human papilloma virus.
35. (c) Reproductive health is a crucial part of general health and a central feature of human development. It is a reflection of health during childhood, and crucial during adolescence and adulthood, Reproductive healthy societies have normal sex related emotional and behavioural interactions.
36. (c) Reproductive health is defined as a state of physical, mental, and social well-being in all matters relating to the reproductive system, at all stages of life. Reproductive health in society can be improved by introducing sex education in schools, increasing medical assistance, ban on amniocentesis, spreading awareness on contraception and STDs and providing equal opportunities to male and female.
37. (c)
38. (a) Increased health facilities and rapid decrease in maternal mortality rate are among the various reasons of population explosion.
39. (b) Sexually Transmitted Diseases (STDs) are infections that are commonly passed from one person to another during sexual contact. Except for having unprotected sex, all the other reasons are helpful to avoid transmission of STDs.
40. (c) Zygote Intrafallopian Transfer (ZIFT) is an infertility treatment. It is used when a blockage in the fallopian tubes prevents the normal binding of sperm to the egg. Egg cells are removed from a woman's ovaries,

and in vitro fertilized. The resulting zygote is placed into the fallopian tube.

41. (d) The Intra Uterine Device (IUD) is a small 'T' shaped device with a monofilament tail that is inserted into the uterus by a health care practitioner. It increases phagocytosis of sperm within the uterus and the copper ion released suppresses sperm motility and fertilizing capacity of sperms.
42. (a) The diaphragm is one of a barrier method of contraception. It is a shallow, dome-shaped cup with a flexible rim and made of silicon. It is inserted into the female reproductive tract to cover the cervix. To be effective in preventing pregnancy, diaphragms need to be used in combination with spermicide, which is a chemical that kills sperm.
43. (b) Birth control pills (oral contraceptive) check ovulation by inhibiting the secretion of follicle stimulating (FSH) and luteinizing hormone (LH) that are necessary for ovulation such contraceptives are small oral doses of either progestogens or progestogen-estrogen combination and are used by the females they are used in the form of tablets and hence are popularly called the pills.
44. (c) MTP is medical termination of pregnancy. It is not used as a contraceptive method. It is generally performed to get rid of unwanted pregnancies due to rapes, casual relationships etc.
45. (d) Mother is homogametic (produce X, X) and father is heterogametic (X and Y). So, father is responsible for the sex of the child not mother.
46. (a)
47. (b) AIDS can be prevented by using condoms. Condoms are the barrier contraceptive method. Contraceptive planted under the skin have synthetic steroid preparation. It works similar to the contraceptive pills.
48. (c) Cu-7 and Cu-T are intrauterine contraceptive devices for females. They do not suppress sperm motility. Their mode of action is different. Cu-T and Cu-7 discharge 50-75 micrograms of ionic copper into the uterus daily. These copper ions interfere with life-sustaining functions that regulate implantation in the uterus. No any hormone is released by them.
49. (c) Intrauterine device (IUD) Copper- T is plastic or metal object placed in the uterus by a doctor. Copper- T prevents the fertilization of the egg or implantation of the embryo. Their presence perhaps acts as a minor irritant and this makes the egg to move down the fallopian tubes and uterus rather quickly before fertilization or implantation.
50. (b) A contraceptive pill prevents ovulation, condom prevents sperms to reach the cervix, vasectomy allows the semen to flow but the latter contains no sperms. Copper-T prevents implantation in females.
51. (b) Intra Uterine Devices are available as the non-medicated IUDs (e.g., Lippes loop), copper releasing IUDs (CuT, Cu7, and Multiload 375). Progestasert, LNG-20 are hormone releasing IUDs.
52. (a)
53. (d) ICSI (Intracytoplasmic sperm injection) - Formation of embryo by directly injecting sperm into the ovum
IUI (intrauterine insemination) - Artificially introduction of semen into the vagina or uterus
IUT (Intra uterine transfer) - Transfer of embryo with more than 8 blastomeres into the uterus
GIFT (Gamete intra fallopian transfer) - Transfer of ovum collected from a donor into the fallopian tube where fertilization occur
ZIFT (Zygote intra fallopian transfer) - Transfer of the zygote or early embryo (with upto 8 blastomeres) into a fallopian tube.
54. (b) Saheli is a non- hormonal birth control pill. It is different from other birth control pills because it doesn't contain any hormones. Instead of using the hormone estrogen to prevent pregnancy, it contains a drug that blocks estrogen.
Non Medicated IUDs - Lippes loop
Lactational amenorrhea - Absence of menstruation
Diaphragms, cervical caps, vaults - Cover the cervix during the coitus.
55. (a) The figure shows the process of tubectomy. This is a surgical method to prevent pregnancy in women. In tubectomy small part of the fallopian tube is removed or tied through a small cut in the abdomen or through vagina.
56. (c) In R, the fallopian tubes have been blocked, and in S, they are cut out. Both the procedures completely make it impossible for fertilization to occur.
57. (a) The given figure is of male condom. A male condom is a thin sheath that covers the penis during intercourse and protects against sexually transmitted infection (STI) and preventing direct contact between the penis and vagina, as well as collecting the semen and preventing it from entering the vagina.
58. (d) The given figure is a contraceptive implant. It is a small flexible tube which is inserted under the skin (typically the upper arm) and prevents pregnancy by releasing hormones that prevent ovaries from

releasing eggs and by thickening cervical mucus.

59. (a) The given figure showing the procedure of vasectomy, in which a small part of the vas deferens is removed or tied up through a small incision on the scrotum.
60. (b) Condoms are barriers made of thin rubber/ latex sheath that are used to cover the penis in the male or vagina and cervix in the female.
61. (a) The given figure is that of copper CuT. CuT is a simple copper releasing IUD made of a flexible, "T" shaped piece of plastic wrapped with a thin copper containing wire. It makes the uterus and fallopian tubes produce fluid that kills sperm. This fluid contains white blood cells, copper ions, enzymes, and prostaglandins. Copper ions prevent pregnancy by inhibiting the movement of sperm, because the copper-ion-containing fluids are directly toxic to sperm. Even if an aggressive little spermatozoon fertilizes an egg, the copper ion laden environment prevents implantation of the fertilized egg, and thus pregnancy.
62. (c)
63. (c) Inability of an individual to inseminate the female or due to very low sperm counts in ejaculates leads to infertility. It could be corrected by artificial technique. In artificial technique the semen is collected and artificially introduced either into the vagina or into the uterus (IUI - intra-uterine insemination) of the female.
64. (a) Syphilis is a chronic bacterial disease that is contracted chiefly by infection during sexual intercourse, but also congenitally by infection of a developing foetus. Syphilis is completely curable if detected early and treated properly.
65. (b) Rapid declines in death rate, maternal mortality rate (MMR) and infant mortality rate (IMR) as well as an increase in number of people in reproductive age are probable reasons for the present increase in India's population.
66. (a) The Cu ions released suppress sperm motility and the fertilizing capacity of sperms.
67. (a) Birth control pills (oral contraceptives) check ovulation in female by inhibiting the secretion of follicle stimulating hormone and luteinizing hormone that are important for ovulation.
68. (d) Sterilization techniques can be considered as the safest birth control measures. It provides a permanent and sure birth control. It is called vasectomy in male and tubectomy in female.
69. (d)
70. (c) Assisted reproductive technologies (ART) include a number of special techniques which assist infertile couples to have children. *In-vitro* fertilization is one such technique.
71. (d) AIDS, genital herpes and hepatitis B are sexually transmitted diseases which are not completely curable.
72. (a)
73. (d) Family planning allows individuals and couples to anticipate and attain their desired number of children and the spacing and timing of their births. It is achieved through use of contraceptive methods and the treatment of involuntary infertility (like tubectomy, vasectomy). A woman's ability to space and limit her pregnancies has a direct impact on her health and well-being as well as on the outcome of each pregnancy.
74. (d) Overpopulation is an undesirable condition where the number of existing human population exceeds the carrying capacity of Earth. It is caused by number of factors like, reduced mortality rate, better medical facilities, depletion of precious resources etc. Consequences of overpopulations are depletion of natural resources, degradation of environment, shortage of food supply, rise in unemployment, high cost of living, and increase of poverty.
75. (d) The described sterilization process is called vasectomy in which a small incision was done on the scrotum and a part of vas deferens is removed or tied up. Due to this gamete transport is blocked and thereby prevents conception.
76. (b)
77. (a) Emergency contraceptives are effective if used within 72 hours of coitus.
78. (b) Condom is a barrier device that may be used during sexual intercourse to reduce the probability of pregnancy and spreading sexually transmitted infections (STIs/STDs) such as HIV/AIDS. It is put on an erect penis and physically blocks ejaculated semen from entering the body of a sexual partner. Condoms are also used for collection of semen for use in infertility treatment.
79. (a) To get rid of unwanted pregnancies and to prevent the fatality or harmfulness to the mother or to foetus or both due to the continuation of pregnancy are the reasons on the basis of which pregnancy can be terminated

80. (c) Syphilis, gonorrhea and genital warts are sexually transmitted disease which specifically affects the sex organs. Syphilis is caused by the spirochete bacterium *Treponema pallidum*. Gonorrhea is caused by *Neisseria gonorrhoeae*, a bacterium that can grow and multiply easily in mucus membranes of the body. Genital warts, which are also called condylomata acuminata or venereal warts, are growths in the genital area caused by a sexually transmitted papilloma virus.

The AIDS (Acquired immunodeficiency syndrome) is a severe immunological disorder caused by the retrovirus HIV. The illness alters the immune system, making people much more vulnerable to infections and diseases.

81. (c) Sexually transmitted infections (STI), also referred to as sexually transmitted diseases (STD) and venereal diseases (VD), are infections that are commonly spread by sex, especially vaginal intercourse, anal sex and oral sex. Most STIs initially do not cause symptoms. Symptoms and signs of disease may include: vaginal discharge, penile discharge, ulcers on or around the genitals, and pelvic pain. Principle i, ii, and iv will not help people to become free from the infection of sexually transmitted diseases.

82. (a) Hepatitis B is an infectious disease caused by the hepatitis B virus (HBV) which affects the liver. HIV (human immunodeficiency virus) is a virus that attacks the immune system, the body's natural defense system. Without a strong immune system, the body has trouble fighting off disease. Both the diseases can also be transmitted by sharing of injection needles, surgical instruments, etc., with infected persons, transfusion of blood, or from an infected mother to the foetus too.

83. (a) Infertility is defined as not being able to get pregnant despite having frequent, unprotected sex for at least a year for most people and six months in certain circumstances. Reasons for infertility include drugs, diseases, and congenital problems, immunological or psychological problems.

Contraception is the deliberate use of artificial methods or other techniques to prevent pregnancy as a consequence of sexual intercourse. Assisted reproductive technology (ART) is the technology used to achieve pregnancy in procedures such as fertility medication, artificial insemination, in vitro fertilization and surrogacy. It is reproductive

technology used primarily for infertility treatments, and is also known as fertility treatment.

84. (b) Artificial insemination is the assisted reproductive technology that has been used for the longest time period. It can help treat certain kinds of infertility in both men and women. In this procedure, sperms are inserted directly into a woman's cervix, fallopian tubes, or uterus. This makes the trip shorter for the sperm and bypasses any possible obstructions. Intra uterine insemination (IUI), in which the sperm is placed in the uterus, is the most common form of artificial insemination.

85. (c)