## Sample Question Paper (Chapter-4)

## Class-12 Biology | Term-I

#### **General Instructions:**

- 1. The Question Paper contains three sections and a total of 60 questions.
- 2. Section A has 24 questions. Attempt any 20 questions.
- 3. Section B has 24 questions. Attempt *any 20* all questions.
- 4. Section C has 12 questions. Attempt **any 10** questions.
- 5. All questions carry equal weightage of **0.7** marks.
- 6. There is no negative marking.

## Section – A

Section – A consists of 24 questions. Attempt any 20 questions from this section.

### <u>The first attempted 20 questions would be</u> <u>evaluated.</u>

- 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) USA3. The family planning programmes in India were initiated in

(a) 1951	(b) 1961
(c) 1971	(d) 1981

- 4. RCH stands for
  - (a) Routine Check-up of Health
  - (b) Reproduction Cum Hygiene
  - (c) Reversible Contraceptive Hazards
  - (d) Reproductive and Child Health Care
- **5.** The technique which makes use of amniotic fluid for the detection of prenatal disorder is called as
  - (a) laparoscopy
  - (b) amniocentesis
  - (b) and accord
  - (c) endoscopy
  - (d) ultrasound
- **6.** '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 Immunological & Biologicals corp. Ltd.

- 7. 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
- 8. Which of the following is traditional method of contraception?
  - (a) Implantation
  - (b) Lactational amenorrhoea

- (c) Condoms
- (d) Sterilization
- **9.** Which of the following contraceptive also provides protection from contacting STDs and AIDS?
  - (a) Diaphragms
  - (b) Spermicidal foams
  - (c) Condoms
  - (d) Lactational amenorrhoea
- **10.** The diaphragm, cervical cap and vaults are
  - (a) disposable contraceptive devices
  - (b) Reusable contraceptives
  - (c) Non-medicated IUDs
  - (d) Cu-releasing IUDs
- **11.** 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
- 12. IUDs stands for
  - (a) Intra Uterine Devices
  - (b) Internal Uterine Devices
  - (c) Inseminated Uterine Devices
  - (d) Injected Uterine Devices
- 13. Which of the following ions plays an effective role in the activity of IUDs?
  (a) Iron
  (b) Zinc
  (c) Copper
  (d) Ammonium
- **14.** 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
- **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
  - (d) 20 (c) 18
- 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.** In amniocentesis, the fluid is taken from (a) foetal blood
  - (b) mother's blood
  - (c) body fluid of mother
  - (d) fluid surrounding foetus
- 22. The diaphragm, cervical cap and vaults are
  - (a) disposable contraceptive devices
  - (b) reusable contraceptives
  - (c) IUDs
  - (d) Implants
- 23. Birth control pills check ovulation in female by inhibiting the secretion of (a) follicle stimulating hormone (FSH)
  - (b) luteinizing hormone (LH)
  - (c) both (a) and (b)
  - (d) None of these
- 24. A childless couple can be assisted to have a child through a technique called GIFT. The full form of this technique is :
  - (a) Gamete intra fallopian transfer
  - (b) Gamete internal fertillization and transfer
  - (c) Germ cell internal fallopian transfer
  - (d) Gamete inseminated fallopian transfer

# Section – B

Section - B consists of 24 questions (Sl. No.25 to 48). Attempt any 20 questions from this section.

## The first attempted 20 questions would be evaluated.

Question No. 25 to 28 consist of two statements – <u>Assertion</u> (A) and <u>Reason (R)</u>. Answer these questions selecting the appropriate option given below:

- a) Both A and R are true and R is the correct explanation of A
- b) Both A and R are true and R is not the correct explanation of A
- A is true but R is false c)
- d) A is False but R is true.
- 25) <u>Assertion</u> : Copper releasing IUDs are used as contraceptives. Reason: Cu ions released form IUDs suppresses the sperm motility and the fertilizing capacity of sperms.
- 26) Assertion : Intentional or voluntary termination of pregnancy before full term is called MTP. <u>Reason</u>: MTP has a insignificant role in decreasing the population.
- 27) Assertion : Inability to conceive or produce children even after years of unprotected sexual cohabitation is called infertility.

<u>Reason</u>: ART is commonly used for such couples.

28) <u>Assertion</u>: 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.

- **29)** One of the following is not a method of contraception - which one?
  - (a) Tubectomy
  - (b) Condoms
  - (c) Pills of a combination of oxytocin and vasopressin
  - (d) Lippes loop
- **30)** When was The Medical Termination of Pregnancy (Amendment) Act was introduced? (a) 1951 (b) 1971
  - (c) 2015 (d) 2017
- **31)** 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 - intrauterine insemination) of the female." Identify A to D.

	Α	В	С	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		

- 32) 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

- **33)** 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)
- 34) 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.
- 35) 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.
- 36) 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.

- **37)** 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.
- **38)** 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
- **39)** 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
- (d) Oral contraceptives (c) Injectable
- **40)** 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

		Colu	ım	n	-II		
-	-						

- (Method) \_\_(Mode of Action) A. The contraceptive pill
  - I. Prevents sperms reaching cervix
  - II. Prevents implantation III. Prevents ovulation
- C. Vasectomy D. Copper T

B. Condom

- IV. Semen contains no sperms (a) A - II; B - III; C - I; D - IV
- (b) A III; B I; C IV; D II
- (c) A IV; B I; C II; D III
- (d) A III; B IV; C I; D II
- 41) Under ZIFT procedure, zygote or embryos, with up to 8 blastomeres can be transferred into the
  - (b) Placenta (a) Uterus
  - (c) Fallopian tube (d) Cervix
- 42) \_ is a popular brand of condom for males.
  - (a) 'Nishodh' (b) 'Nirodh'
  - (c) 'Nidosh' (d) 'Nirdosh'
- 43) A natural method of contraception, periodic abstinence is
  - (a) Abstaining from coitus from day 1 to 5 of the menstrual cycle.
  - (b) Abstaining from coitus from day 17 to 22 of the menstrual cycle.
  - (c) Abstaining from coitus from day 10 to 17 of the menstrual cycle.
  - (d) Abstaining from coitus from day 5 to 10 of the menstrual cycle.

- 44) IMR stands for
  - (a) Indigenous Mortality Rate
  - (b) Infant Migratory Rate
  - (c) Infant Mortality Rate
  - (d) Infant Mitigation Rate
- 45) In tubectomy, which part of reproductive system is removed and/or tied up? (a) Cervix (b) Oviduct
  - (d) Ovary (c) Uterus
- 46) Misuse of amniocentesis has led to the misuse of
  - (a) MTP (b) STD (c) RTI

(d) HIV

- 47) Severe complications of STDs lead to further complications like
  - (a) Abortion (b) Still birth
  - (d) All of these (c) Ectopic pregnancy
- 48) Full form of RCH is
  - (a) Reproduction and Contraception Hazard
  - (b) Reproductive and Child Health Care
  - (c) Research and Care Development (d) Reproductive Community Health
    - Centre

## Section – C

Section-C consists of one case followed by 6 questions linked to this case (Q.No.49 to 54). Besides this, 6 more questions are given. Attempt any 10 questions in this section. The first attempted 10 questions would be evaluated.

### Case.

STDs constitute a major public health problem for both developing and developed countries. The emergence of HIV infection has increased the importance of measures aimed at control of STDs. A proper understanding of the patterns of STDs prevailing in different geographic regions of a country is necessary for proper planning and implementation of STD control strategies. It is with this aim that the authors have reviewed the relevant published literature from India over the past 25 years.

To sum up, bacterial STDs like chancroid and gonorrhoea are showing a declining trend, but the viral STDs like herpes genitalis and condylomata acuminata are showing upward trend. There is a decline in the number of patients with STDs attending the hospital. Whether this is due to an actual decrease in the incidence of STDs or due to other factors is uncertain. The increased availability of facilities for treatment of STDs at peripheral centers might be a factor leading to a decline in the number of patients with STDs approaching higher centers like the teaching hospital where this study was undertaken. The emphasis on the syndromic approach to the management of STDs might have increased the accessibility to healthcare for these patients with STDs.

Awareness about HIV and fear of contracting the STDs are likely to have influenced the risk-taking behavior of people, thereby reducing the likelihood of being infected with STDs. Another factor to be considered is the widespread use of antibacterial, including quinolones and the new macrolides, for the treatment of other diseases. This can result in partial treatment or modified course of the bacterial STDs, thereby leading to apparent reduction in the total number of cases of STDs attending STD clinics as well as a decrease in the proportion of bacterial to viral STDs.

- **49)** Which of the following is not a bacterial STD?
  - (a) Syphilis (b) Gonorrhoea
  - (d) Chlamydiasis (c) Herpes genetalis
- 50) Choose the odd one out -(a) Genital herpes (b) Genital warts
- (c) Trichomoniasis (d) Hepatitis B **51)** Which of the following symptoms is not
  - seen in case of an STD? (a) Slight pain in genitals
  - (b) Swelling in the genitals
  - (c) Itching and fluid discharge from the genitals
  - (d) Redness/discoloration in the genitals
- **52)** Which of the following is not a complication which arises when STDs are not treated on time? (a) PID (b) Infertility

  - (c) Cancer of Rectum (d) Still Birth
- 53) Assertion: Persons in the age group between 15-24 years is more vulnerable to sexually transmitted infections. *Reason*: People in reproductive age get sexually transmitted infections during sexual intercourse with their partner.
  - (a) Both A and R are true and R is the correct explanation of A
  - (b) Both A and R are true and R is not the correct explanation of A
  - (c) A is true but R is false
  - (d) A is False but R is true.
- **54)** One could be free of these infections by following which of the principles given below?
  - (a) Avoid sex with unknown partners/multiple partners.
  - (b) Always try to use condoms during coitus.
  - (c) In case of doubt, one should go to a qualified doctor for early detection and get complete treatment if diagnosed with infection.
  - (d) All of these
- 55) Hepatitis B is transmitted through
  - (a) blood transfusion
  - (b) intimate physical contact
  - (c) Sexual contact
  - (d) All of these

56) To form embryo in vitro, the male gamete is transferred into female gamete directly. Such technique is called \_\_\_\_\_.(a) IUI (b) IUT

ICSI			(d)	GIFT

- **57)** 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)
- **58)** Artificial insemination means

(c)

- (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.
- **59)** Motivation for smaller families in India can be provided by
  - (a) Slogans like 'Hum Do Hamare Do'.
  - (b) Raising marriageable age (female-18 years and male-21 years).
  - (c) Giving incentive to couples with small families.
  - (d) All the above
- **60)** Which of the following is hormone releasing IVD?
  - (a) Multiload 375
  - (b) Lippes loop
  - (c) Cu7
  - (d) LNG-20

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