REVISION QUESTION PAPER (SET 3)

BIOLOGY

CHAPTER – HOW DO ORGANISMS REPRODUCE?

Q1. ASSERTION -REASON (1)

a)Both (A) and (R) are true and (R) is correct explanation of the Assertion.

b) Both (A) and (R) are true and (R) is not the correct explanation of the Assertion.

c) (A) is true but (R) is false.

d) (A) is false but (R) is true.

Assertion: Copper-T can be used as a contraceptive method.

Reason: It prevents from sexually transmitted diseases.

Answer- c) (A) is true but (R) is false.

Q2. 'Reproduction helps in providing stability to population of species '-Justify. (2)

Answer- Reproduction is the process of producing new individuals of the same species by existing organisms of a species, so, it helps in providing stability to population of species by giving birth to new individuals as the rate of birth must be at par with the rate of death to provide stability to population of a species. Reproduction is the only means to ensure the continuity of a species. The surviving organisms replace the naturally dying members of the population. Hence the population as a whole is not affected and remains stable.

Q3. a) How does the uterus prepare itself and nurture the growing embryo?

b) What happens when the egg is not fertilized? (2+1=3)

Answer-

a) Under the influence of hormones from pituitary and growing Graafian follicle, the endometrium of uterus thickens, develops blood vessels and glands for nourishing the future embryo.

Nutrition for Growing Embryo. The contact region between embryo and endometrium grows into placenta. Placenta helps the embryo in obtaining nourishment (and oxygen) from blood sinuses of the uterus.

b) When Egg is not Fertilized: The uterine endometrium begin to degenerate. This sloughs off the endometrial lining, releasing a lot of mucus and blood. It is called menstruation. Menstruation lasts for 3-5 days.

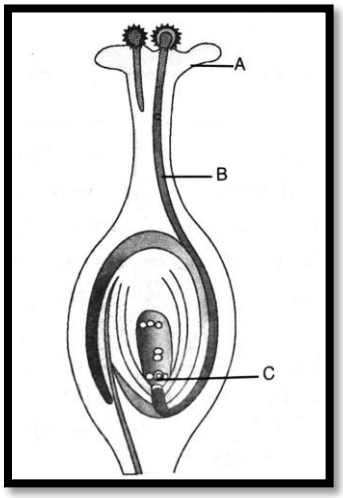
Q4. Many fully differentiated organisms have the ability to give rise to new individual organisms from their body parts. If the individual is somehow cut or broken up into many pieces, many of these pieces grow into separate individuals.

a) Name the process involved.
b) List two organisms in which this process may be observed.
c) How is this process different from the process of reproduction in Amoeba? (1+1+2=4)

Answer-

a) Regeneration
b) *Planaria*, *Hydra*
c) Reproduction in Amoeba- Binary fission
Binary fission and regeneration are two types of asexual reproduction. Binary fission is the process by which a cell divides into two identical daughter cells with the same genetic information. Regeneration is the process by which an organism can regrow certain body parts that are broken or cut. The broken part can regenerate as a new individual.

Q5. a) Identify A, B and C in the given diagram and mention their functions.



b) Name the parts of flower that develop after fertilization into:

i) Seed-

ii) Fruit- (3+2=5)

Answer-

a) A-stigma: Reception of pollen grains and providing nutrients to pollen grains for their germination

B-pollen tube: Carrying of male gametes to inside the ovule for fertilization.

C-egg: Forms zygote and then embryo after fertilization.

b) Seed- Ovule

Fruit- Ovary