

Question Bank 2021

College Name- Art's commerce and Science College Bodwad

SEM II F.Y. BSc

Paper II zoology Developmental biology of vertebrates

1.The Is the process of gamete formation in the sexually reproducing animal.

A) Spermatogenesis **B) Gamatogenesis** C) Oogenesisi D) Gomogenesis

2. The process of formation of male Is called Spermatogenesis.

A) spermatids B) ova **C) Spermatozoa** D) Egg

3. Spermatogenesis occurs in the

A) Overy B)Reproductive organ C) Uterus **D) Testis**

4. The process of production of Ovum is known as.....

A) Spermatogenesis B) Gamatogenesis **C) Oogenesis** D) Gomogenesis

5) In the Spermatids are modified into spermatozoa.

A) Spermatogenesis B) Spermatogenesis C) **Spermiogenesis** D) Spermatidogenesis

6) The developing spermatozoa are embedded in the cytoplasm of the

A) germ cells B) cone cells **C) sertoli cells** D) Somatic cells

7) The oocytes are surrounded during their entire growth and maturation stages by special cells of the overy called

A) follicle cells B) germ cells C) sertoli cells D) somatic cells

8) Cells provide production, mechanical support and nutrition to the developing spermatozoa.

A) follicle cells B) germ cells **C) sertoli cells** D) somatic cells

9) Synthesis of yolk is called as

A) Vitellogensis B) vitellolysis C) Vitellogenosis D) Vitellogenolysis

10) Yolk is mainly synthesized and secreted by the liver under the influence of Produced by the wall of maturing follicle.

A) progesterone B) prolactin **C) Oestrogen** D) relaxin

11) During fertilization nuclei of both gametes unite to form a single cell, the

A) Zymogen **B) Zygote** C) zygote D) Zymogene

12) The fertilization occurs, outside the bodies of male and female parents, is called..... Fertilization.

A) intra B) internal **C) external** D) none of this.

13) The process of mixing of hereditary material of male and female pronuclei is called

A) amphimixis B) amphimi C) amphymixes D) amplexus

14) is the fertilization of an egg by multiple sperm.

A) polyspermoisis **B) polyspermy** C) polysperm D) polygenesis

15) In frog; the cleavage is.....

A) Holoblastic B) incomplete C) hemiblastic D) meridional

16) In blastula , a small space , the, appear between the blastomeres.

A) holoblastocoele **B) blastocoele** C) atchenteron D) blastocoelom

17) During gastrulation, the blastomeres are arranged into layers.

A) two **B) three** C) four D) five

18) The movement of cells during gastrulation is called movements.

A) morpholytic **B) morphogenetic** C) morphological D) morphic

19) The morphogenetic movements are of types.

A) two B) three C) four D) five

20) The morphogenetic movements are of two types, namely and emboly .

A) epibol B) epibelc C) epimorphic **D) epiboly**

21) The human egg cortex contains pigment granules and numerous tiny membrane - -ounded vesicles called

A) cortex granules B) cortical pigments **C) cortical granules** D) egg granules

22) The embryo is developed from

A) inner cell mass B) trophoblast C) trophosphere D) zona pellucida

23) is the movement of the cells towards a single point.

A) involution B) divergence C) invagination **D) convergence**

24) is rolling in of cells

A) involution B) divergence C) invagination D) convergence

25) the cells move in different directions from a single point.

A) involution **B) divergence** C) invagination D) convergence

26) is the infolding or inpushing or insinking of a layer of cells into the blastocoel.

A) involution B) divergence **C) invagination** D) convergence

27) During individual cells or group of cells separate from the primitive streak and migrate into the space between epiblast and hypoblast.

A) involution **B) ingression** C) invagination D) convergence

28) refers to the separation of a layer of cells from another layer by splitting.

A) involution B) ingression **C) delamination** D) convergence

29) refers to the reduction in size of the blastopore.

A) constriction B) ingression C) delamination D) convergence

30) Neural tube is developed from prospective

A) neuroendoderm B) neuromesoderm **C) neuroectoderm** D) ectoderm.

31) About 6 days after fertilization the blastocyst loosely attaches to the endometrium in a process called.....

a) fixation **b) implantation** c) implant d) transplant

32) Different regions of the..... are named based on their positions relative to the site of the implanted blastocyst.

a) endometrium b) decidua basalis **c) decidua** d) decidua capsularis

33) By about 27 weeks after implantation, the..... degenerates and disappears

a) decidua b) decidua basalis c) decidua parietalis **d) decidua capsularis**

34) provide large amounts of glycogen and lipids for the developing embryo and fetus and later becomes the maternal part of the placenta

a) decidua **b) decidua basalis** c) decidua parietalis d) decidua capsularis

35) is the process of forming the placenta

a) placentation b) placementation **c) placentation** d) placitation

36)The fetal portion of placenta formed by the chorionic villi of the.....

a)endometrium b)allantois **c)chorion** d)amnion

37)the maternal portion of placenta formed by the decidua basalis of the.....

a)endometrium b)allantois c)chorion d)amnion

38)The placenta allowsto diffuse from maternal blood into fetal blood.

a) Oxygen and nutrients b)oxygen c)nutrients d)waste

39)The placenta allowsdiffuse from fetal blood into maternal blood.

a)carbon dioxide **b)carbon dioxide and wastes** c)oxygen d)waste.

40) The placenta stores nutrients such as carbohydrates,proteins,calcium and iron,which are released into..... circulation as required.

a)paternal b)maternal **c)fetal** d)blood

41)The umbilical cord consists of.....umbilical arteries and.....umbilical vein.

a)one,two **b)two,one** c)one,three d)three,four

42)The umbilical cord consists of two umbilical arteries that carry deoxygenated.....blood to the placenta.

a)paternal b)maternal **c)fetal** d)none of these

43)Umbilical vein that carries.....acquired from the mothers intervillous spaces into the fetus.

a)oxygen and nutrients b)oxygen c) nutrients d) waste

44)Metamorphosis is the abrupt transition from..... form

a)egg to larval b)larva to pupa **c)larval to adult** d)pupa to larva

45) In frog, metamorphosis is controlled by hormones such as.....

a) insulin b) adrenaline c) vasopressin **d) thyroxine**

46) In frog,.....haemoglobin has lower affinity for oxygen and is highly sensitive to acid.

a) larval b) pupal c) tadpole **d) adult**

47) During metamorphosis, the.....shortens because of the change from herbivorous to carnivorous diet.

a) oesophagus **b) intestine** c) stomach d) liver

48) During metamorphosis, larval pronephros changes into.....of adult.

a) mesonephros b) metanephros c) archinephros d) nephrons

49).....alone can cause metamorphosis in frog larva.

a) iodine b) iodotrohin **c) iodine** d) iodol

50) A layer of.....surrounds the entire umbilical cord and gives it a shiny appearance.

a) chorion b) endometrium **c) amnion** d) decidua

51) The essential functional elements of the placenta are very small finger-like.....

a) projection **b) villi** c) chorionlaevae d) chorionfrondosum

52) The progressive production of the phenotypic characteristics of an organism is called.....

A) Development b) embryology c) morphology d) none of these

53) Once fertilized, the ovum is referred to as a.....

a) ovum b) ova **c) zygote** d) fetus

54) Zygote iscells.

- a) haploid **b) diploid** c) triploid d) multicellular

55)is a particulate hereditary unit which is transmitted in the chromosome .

- a) nucleus b) DNA c)chromatin **d) gene**

56)remain dormant throughout the period of cleavage .

- a) nucleus b) DNA c)chromatin **d) gene**

57) During gastrulation many lethalmake their phenotypic expression into death of the gastrula .

- a) mutations** b)toxins c)chemicals d)antigen

58) New cells following the rapid series of division, cleavage, and the cells begin to arrange themselves as.....layers known as the primary germ layers.

- a) two **b)three** c)four d)five

59)A cell is set to bewhen its specialized fate is fixed.

- a) differentiated b)demonstrate **c)determined** d) none of these

60) The chemical substance that is emitted by an inducer is called

- a) chemogen b) biogene **c) morphogen** d)methenogene

61), the tissue that produces a single (or signals) that changes the cellular behavior of the other tissue.

- a) induction b) responder c) indogen **d) inducer**

62)is the process by which cells and tissues acquire certain characteristics features and become different from each other .

- a) differentiation** b) induction c)determination d)none of these

63) The process in which the origin and development of the size form and other structural features of the organism occur is known as.....

a) morphin **b) morphogenesis** c) morphogen d) methenogene

64) Intracellular communication refers to the communication between.....

a) Cell b) Tissue c) Organ d) Tissue to tissue

65) Cancer cells will often communicate via gap junction, which are proteins known as.....

a) connexins b) conexeens **c) connexins** d) cobbenxins

66) Cell locomotion is regulated by

a) Chemo-sterilants **b) Chemo- attractants and adhesive molecules**

c) Adhesive substance d) None of these

67)is a normal feature of embryogenesis and metamorphosis.

a) gene **b) Cell death** c) chromosomes d) nucleus

68) Programmed cell death is an active process characterized by a distinct morphological change known as.....

a) apoptosis b) morphogenesis c) mutogens d) morphogens

69) In *C. elegans* genes play key roles in regulating and executing apoptosis.

a) One b) Two **c) Three** d) Four

70)is the progressive changes in shape and organization in body during development.

a) Differentiation **b) Morphogenesis** c) Invagination d) None