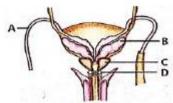
## Shiksha Classes, Bhandara Biology Human Reproduction

<b>(1.)</b> [	The testes are situated outside the abdomin	nal cav	vity within a pouch called
(a.)	urethra	(b.)	scrotum
(c.)	penis	(d.)	none of these
<b>(2.)</b> ]	In humans, sperms are produced in		
(a.)	epididymis	(b.)	rete testis
(c.)	seminiferous tubules	(d.)	vas deferens
(3.)	Sertoli cells which line the seminiferous to	ubules	from inside
(a.)	undergo meiotic division to produce sperms	(b.)	provide nutrition to the germ cells
(c.)	synthesise and secrete testicular hormones	(d.)	both (a) and (c)
5	Refer to the given figure showing section some parts are labelled as A, B, C and D the developing sperms.		
(a.)	A	(b.)	C
(c.)	D	(d.)	В
<b>(5.)</b> <sup>7</sup>	The regions outside the seminiferous tubu	les tha	t contain Leydig cells are called
(a.)	interstitial spaces	(b.)	antrum
(c.)	scrotum	(d.)	none of these
<b>(6.)</b> [	Testicular hormones called androgens are	secret	ed by
(a.)	interstitial cells	(b.)	Leydig cells
(c.)	Sertoli cells	(d.)	both (a) and (b)
	Which one is odd from the following strugsystem.	ctures	with reference to the male reproductive
(a.)	Rete testis	(b.)	Epididymis
(c.)	Vasa efferentia	(d.)	Isthmus
(8.)	The vas deferens opens into urethra as		
(a.)	epididymis	(b.)	ejaculatory duct
(c.)	efferent ductule	(d.)	ureter
(9.) '	Which of the following depicts the correct	t pathy	vay of transport of sperms?
(a.)	Rete testis → Efferent ductules → Epididymis → Vas deference	(b.)	Rete testis → Epididymis → Efferent ductules → Vas deference
(c.)	Rete testis → Vas deference → Efferent ductules → Epididymis	(d.)	Efferent ductules → Rete testis → Vas deference → Epididymis

(10.) Refer to the given figure and choose the correct option for the parts labelled as A, B, C and D.



A	В	С	D						10
` '	Vas defere Prostate		ninal vesicle urethral gland	(b.)	S	Vasa ef Seminal ethral g	vesicle		Prostate
(c.) B	Prostate sulbourethra		inal vesicle Vasa deferens	(d.)		ulboure Prostate			Vas deferens ferentia
( <b>11.)</b> Amo	ong the follo	owing wh	ich one is not a	ın acce	sso	ry duct	of male	e reprod	luctive system?
(a.) Re	ete testis			(b.	)	Vasa ef	ferentia	ì	
(c.) Va	as deferens			(d.	)	Urethra	L		
( <b>12.)</b> The	ejaculatory	duct tran	sports the speri	ms to t	he o	outside	through	1	
(a.) ur	ethra		CQI	(b.	)	rete test	tis		
(c.) va	sa efferentia	a	./0	(d.	)	none of	these		
<b>(13.)</b> Uret	hral meatus	is/are	<b>O</b> ,						
(a.) the	e urinogenit	al duct		(b.	)	opening	g of vas	deferei	ns into urethra
(c.) ex		ing of the	urinogenital	(d.	-	muscles duct	s surrou	ınding t	he urinogenital
	ch the Colum codes given		ts) to Column-	-II (fea	tur	e) and o	choose	the con	rect option from
Column-I				Colur	nn-l	II			
(A) Sertoli	cells			(1)	Tes	ticular h	ormone	S	
(B) Leydi	g cells			(2)	Ext	ernal ope	ening of	urethra	
(C) Epidid	ymis			(3)	Nut	rition to	the geri	m cells	
( <b>D</b> ) Ureth	ral meatus			(4)	Mal	le sex ac	cessory	duct	
Codes A	В	C I	)						
(a.) 4	3	2	1	(b.	)	3	1	4	2
(c.) 1	2	3	4	(d.	)	2	4	1	3

(15.) Match the parts given in Column-I to the choose the correct option from the code	es given below.
Column-I	Column-II
(A) Penis	(1) Loose fold of skin
(B) Glans penis	(2) Male external genitalia
(C) Foreskin	(3) External opening urethra
( <b>D</b> ) Urethral meatus	(4) Enlarged end of penis
Codes A B C D	
(a.) 2 4 1 3	(b.) 3 4 1 2
(c.) 2 4 3 1	(d.) 4 3 2 1
(16.) Among the following which one is not a	a male accessory gland?
(a.) Seminal vesicle	(b.) Ampulla
(c.) Prostate	(d.) Bulbourethral gland
(17.) Seminal plasma is contributed by: (I) Set (II) Prostate (III) Urethra (IV)Bulborethral gland	eminal vesicle
(a.) I and II	(b.) I, II and IV
(c.) II, III and IV	(d.) I and IV
<ul><li>(18.) Read the following statements abo statement(s) from the given options.</li><li>(I) Seminal plasma is secreted by seminal ve</li><li>(II) It is rich in sucrose and calcium.</li><li>(III) It contains certain enzymes also.</li></ul>	ut seminal plasma and choose the correct sicles, prostate and bulbourethral glands.
(a.) I and II	(b.) II and III
(c.) I and III	(d.) All of these
statements from the given options (I) It is located in the pelvis region. (II) The testes are situated outside the abdom (III) Each testis has about 350 testicular tubu	•
(a.) I and III	(b.) III and IV
(c.) I and IV	(d.) Only III
(20.) Assertion: The scrotum helps in mainta Reason: The low temperature of the testes is	÷
(a.) Both assertion and reason are true and reason is the correct explanation of assertion.	d (b.) Both assertion and reason are true, but reason is not the correct explanation of assertion.
(c.) Assertion is true, but reason is false.	(d.) Both assertion and reason are false.

	<b>Assertion:</b> The enlarged part of penis is can: The glans penis is covered by a loose f	_	•
(a.)	Both assertion and reason are true and reason is the correct explanation of assertion.	(b.)	Both assertion and reason are true, but reason is not the correct explanation of assertion.
(c.)	Assertion is true, but reason is false.	(d.)	Both assertion and reason are false
(22.)	The primary female sex organ is/are		
(a.)	vagina	(b.)	uterus
(c.)	ovaries	(d.)	external genitalia
<b>(23.)</b> <i>A</i>	Among the following which one is not the	part o	of female reproductive system?
(a.)	Cervix	(b.)	Sertoli cells
(c.)	Mammary glands	(d.)	Oviducts
<b>(24.)</b> T	The parts that constitute the female access	ory du	cts include
(a.)	Fallopian ducts	(b.)	vagina
(c.)	ovaries	(d.)	both (a) and (b)
<b>(25.)</b> ]	Γhe funnel-shaped part of Fallopian tube t	hat rei	mains closer to the ovary is
(a.)	infundibulum	(b.)	fimbriae
(c.)	ampulla	(d.)	isthmus
<b>(26.)</b> T	The part of the oviduct that joins the uteru	s is	
(a.)	ampulla	(b.)	isthmus
(c.)	fimbriae	(d.)	infundibulum
<b>(27.)</b> T	Γhe uterus is also called		
(a.)	womb	(b.)	cervix
(c.)	cervical canal	(d.)	none of these
(28.)	The inner glandular layer that lines the ute	erine ca	avity is
(a.)	perimetrium	(b.)	myometrium
(c.)	endometrium	(d.)	exometrium
(29.)	The uterine layer that undergoes cyclical c	hange	s during menstrual cycle is
(a.)	myometrium	(b.)	endometrium
(c.)	perimetrium	(d.)	both (a) and (b)
(30.)	Which uterine layer exhibits strong contra	ctions	during the delivery of the baby?
(a.)	Endometrium	(b.)	Perimetrium
(c.)	Myometrium	(d.)	Both (a) and (c)

(31.) The female external genitalia in	elude
(a.) mons pubis	(b.) labia majora
(C.) clitoris	(d.) all of these
(32.) The opening of the vagina is oft	en covered partially by a membrane called
(a.) hymen	(b.) clitoris
(c.) labia minora	(d.) none of these
(33.) A tiny finger-like structure which	h lies at the upper junction of the two labia minora is
(a.) hymen	(b.) mons pubis
(c.) clitoris	(d.) none of these
(34.) How many mammary lobes are	found in each breast?
(a.) 20–25	(b.) 15–20
(c.) 10–15	(d.) 25–30
(35.) The alveoli of mammary glands	
(a.) mammary tubules	(b.) mammary duct
(c.) lactiferous duct	(d.) mammary lobes
(26) The milk is qualted out through	
(36.) The milk is sucked out through	(b.) lactiferous duct
(a.) mammary duct (c.) alveoli	(b.) lactiferous duct (d.) none of these
(c.) alveon	(d.) Holle of these
•	ductive system given in Column-I with their functions the correct option from the codes given below.  Column-II
(A) Ovary	(1) Delivery of baby
(B) Fimbriae	(2) Steroid hormone
(C) Myometrium	(3) Secretion of milk
( <b>D</b> ) Cells of alveoli	(4) Collection of ovum
Codes A B C D	
(a.) 2 4 1 3	(b.) 4 3 2 1
(c.) 3 4 1 2	(d.) 1 4 3 2
•	
· · · · · · · · · · · · · · · · · · ·	n in Column-I with their characteristic features given in ect option from the codes given below.  Column-II
(A) Perimetrium	(1) Thick layer of smooth muscles
(B) Myometrium	(2) Thick membranous layer
(C) Endometrium	(3) Glandular layer
	(4) Thin membranous layer

(a.)	2	4	3			
(b.)	4	1	3			
(c.)	1	2	3			
(d.)	3	1	2			
	feature	_		Choose the correct		in Column-I with their characteristic a from the codes given below.
(A) Mo	ons pub	ois		(	(1) Fle	shy folds of tissue
<b>(B)</b> La	bia maj	ora		(	(2) Cus	shion of fatty tissue
( <b>C</b> ) Hy	men			(	( <b>3</b> ) Tin	y finger-like structure
<b>(D)</b> Cli	itoris			(	( <b>4</b> ) Co	vers opening of vagina
Codes	Α	В	C	D		100
(a.)		1	4	3	(b.)	4 3 2 1
(c.)	1	4	3	2	(d.)	2 1 3 4
(40.)	The ed	ges of t	he infun	dibulum possess fir	nger lik	ce projections that
(a.)		_	of fertil	-	(b.)	
		_				fertilisation.
(c.)	are re	esponsil	ole for th	ne release of egg.	(d.)	none of these
( <b>I</b> ) The	codes g e shape	given be e of the	elow. uterus is	atements about uto like inverted pear. gina through a narr		nd choose the correct option from the rvix.
				ervix forms the bir		
` ,	I and		(	<b>)</b>	(b.)	
(c.)	I and	II			(d.)	All of these
	Read 1		owing	statements about	mamm	ary glands and choose the incorrect
(II) Tl	ne man	nmary l	obes of l	ntain glandular tissu preasts contain alve veoli is stored in la	oli wh	ich secrete milk.
(a.)	Only	II			(b.)	Only III
(c.)	Only	Ι			(d.)	I and III
				e the primary sex or e female gamete.	gans.	
(a.)		eason is		eason are correct rect explanation of	(b.)	Both assertion and reason are correct but reason is not the correct explanation of assertion.
(c.)		rtion is	correct,	but reason is	(d.)	Both assertion and reason are incorrect.

Codes A B C

	<b>on:</b> The oviducts, ovaries and cervix consti		
(a.)	Both assertion and reason are correct and reason is the correct explanation of assertion.	(b.)	Both assertion and reason are correct but reason is not the correct explanation of assertion.
(c.)	Assertion is correct, but reason is incorrect.	(d.)	Both assertion and reason are incorrect.
	Assertion: The uterus opens into vagina then: The cavity of cervix is called cervical of	_	a narrow cervix.
(a.)	Both assertion and reason are correct and reason is the correct explanation of assertion.	(b.)	Both assertion and reason are correct but reason is not the correct explanation of assertion.
(c.)	Assertion is correct, but reason is incorrect.	(d.)	Both assertion and reason are incorrect.
	Assertion: Mons pubis is a cushion of fatty on: The labia majora are paired folds of tis		
(a.)	Both assertion and reason are correct and reason is the correct explanation of assertion.	(b.)	Both assertion and reason are correct but reason is not the correct explanation of assertion.
(c.)	Assertion is correct, but reason is incorrect.	(d.)	Both assertion and reason are incorrect.
(47.) . Reaso		open	into their lumen.
(47.) . Reaso	Assertion: The alveoli of mammary lobes on: Several lactiferous ducts join to form a out.  Both assertion and reason are correct and reason is the correct explanation of	open	into their lumen.
(47.) Reaso	Assertion: The alveoli of mammary lobes on: Several lactiferous ducts join to form a out.  Both assertion and reason are correct	open mami	into their lumen. mary duct through which milk is sucked  Both assertion and reason are correct but reason is not the correct explanation
(47.) Reaso (a.)	Assertion: The alveoli of mammary lobes on: Several lactiferous ducts join to form a out.  Both assertion and reason are correct and reason is the correct explanation of assertion.  Assertion is correct, but reason is	open mamma (b.)	into their lumen. mary duct through which milk is sucked  Both assertion and reason are correct but reason is not the correct explanation of assertion.  Both assertion and reason are incorrect.
(47.) Reaso (a.)	Assertion: The alveoli of mammary lobes on: Several lactiferous ducts join to form a out.  Both assertion and reason are correct and reason is the correct explanation of assertion.  Assertion is correct, but reason is incorrect.	open mamma (b.)	into their lumen. mary duct through which milk is sucked  Both assertion and reason are correct but reason is not the correct explanation of assertion.  Both assertion and reason are incorrect.
(47.) Reaso (a.) (c.)	Assertion: The alveoli of mammary lobes on: Several lactiferous ducts join to form a out.  Both assertion and reason are correct and reason is the correct explanation of assertion.  Assertion is correct, but reason is incorrect.  The process of producing gametes by primary and the series of producing gamet	open mamma (b.)  (d.)	into their lumen. mary duct through which milk is sucked  Both assertion and reason are correct but reason is not the correct explanation of assertion.  Both assertion and reason are incorrect.
(47.) Reaso (a.) (c.) (48.) (a.) (c.)	Assertion: The alveoli of mammary lobes on: Several lactiferous ducts join to form a out.  Both assertion and reason are correct and reason is the correct explanation of assertion.  Assertion is correct, but reason is incorrect.  The process of producing gametes by prim gametogenesis	open mamma (b.)  (d.)  nary see (b.)  (d.)	into their lumen. mary duct through which milk is sucked  Both assertion and reason are correct but reason is not the correct explanation of assertion.  Both assertion and reason are incorrect.  ex organs is known as spermatogenesis none of these
(47.) Reaso (a.) (c.) (48.) (a.) (c.)	Assertion: The alveoli of mammary lobes on: Several lactiferous ducts join to form a out.  Both assertion and reason are correct and reason is the correct explanation of assertion.  Assertion is correct, but reason is incorrect.  The process of producing gametes by prim gametogenesis oogenesis	open mamma (b.)  (d.)  nary see (b.)  (d.)	into their lumen. mary duct through which milk is sucked  Both assertion and reason are correct but reason is not the correct explanation of assertion.  Both assertion and reason are incorrect.  ex organs is known as spermatogenesis none of these
(47.) Reaso (a.) (c.) (48.) (a.) (c.)	Assertion: The alveoli of mammary lobes on: Several lactiferous ducts join to form a out.  Both assertion and reason are correct and reason is the correct explanation of assertion.  Assertion is correct, but reason is incorrect.  The process of producing gametes by prim gametogenesis oogenesis  The immature, diploid male germ cells that	open mamma (b.)  (d.)  (a.)  (b.)  (b.)  (d.)	into their lumen. mary duct through which milk is sucked  Both assertion and reason are correct but reason is not the correct explanation of assertion.  Both assertion and reason are incorrect.  ex organs is known as spermatogenesis none of these  duce sperms are secondary spermatocytes
(47.) (A.) (C.) (48.) (C.) (49.) (C.) (C.)	Assertion: The alveoli of mammary lobes on: Several lactiferous ducts join to form a out.  Both assertion and reason are correct and reason is the correct explanation of assertion.  Assertion is correct, but reason is incorrect.  The process of producing gametes by prim gametogenesis oogenesis  The immature, diploid male germ cells that spermatogonia	open mamma (b.)  (d.)  (a.)  (b.)  (d.)  (d.)  (d.)	into their lumen. mary duct through which milk is sucked  Both assertion and reason are correct but reason is not the correct explanation of assertion.  Both assertion and reason are incorrect.  ex organs is known as spermatogenesis none of these  luce sperms are secondary spermatocytes spermatozoa
(47.) (A.) (C.) (48.) (C.) (49.) (C.) (C.)	Assertion: The alveoli of mammary lobes on: Several lactiferous ducts join to form a out.  Both assertion and reason are correct and reason is the correct explanation of assertion.  Assertion is correct, but reason is incorrect.  The process of producing gametes by print gametogenesis oogenesis  The immature, diploid male germ cells the spermatogonia spermatids	open mamma (b.)  (d.)  (a.)  (b.)  (d.)  (d.)  (d.)	into their lumen. mary duct through which milk is sucked  Both assertion and reason are correct but reason is not the correct explanation of assertion.  Both assertion and reason are incorrect.  ex organs is known as spermatogenesis none of these  duce sperms are secondary spermatocytes spermatozoa  esis is normally diploid?

## **ANSWER**

		_	_	<u>AN</u>	<u>SWER</u>	•		T	
(1.)	b	(2.)	c	(3.)	b	(4.)	С	(5.)	a
(6.)	d	(7.)	d	(8.)	b	(9.)	a	(10.)	a
(11.)	d	(12.)	a	(13.)	С	(14.)	b	(15.)	a
(16.)	b	(17.)	b	(18.)	c	(19.)	d	(20.)	a
(21.)	b	(22.)		(23.)	b	(24.)	1	(25.)	a
(26.)	b d	(27.)	a	(28.)	c c	(29.)	b b	(30.)	c a
(31.) (36.)	b	(32.)		(33.)	b	(34.)		(35.) (40.)	b
(41.)	С	1	b	(43.)	a	(44.)	1	(45.)	b
(46.)	+	(47.)		(48.)	a	(49.)	1	(50.)	b
C				6					

## **EXPLANATION**

- **(1.) (b.)** The testes are situated outside the abdominal cavity within a pouch called scrotum. It helps in maintaining the low temperature of testes which is necessary for spermatogenesis.
- **(2.)** (c.) In humans, sperms are produced in seminiferous tubules.
- **(3.) (b.)** Sertoli cells provide nutrition to the germ cells which give rise to sperms. Testicular hormones are secreted by Leydig cells.
- **(4.) (c.)** In the given figure, label D shows Sertoli cells. These cells provide nutrition to the developing sperms.
- **(5.) (a.)** The regions outside the seminiferous tubules that contain Leydig cells are called interstitial spaces. They contain small blood vessels also.
- **(6.) (d.)** Interstitial cells or Leydig cells synthesize and secrete testicular hormones called androgens. These cells are found in the regions outside the seminiferous tubules called interstitial spaces.
- (7.) (d.) Rete testis, epididymis and vasa efferentia are parts of male reproductive system. On the other hand, isthmus is the part of oviduct, i.e., female reproductive system.
- **(8.) (b.)** The vas deferens receives duct from the seminal vesicle and opens into urethra as ejaculatory duct. It transports the sperms to the outside through urethra.
- (9.) (a.) The seminiferous tubules of the testis open into the vasa efferentia through rete testis. The vasa efferentia leave the testis and open into epididymis which leads to vas deferens. Therefore, the correct pathway of transport of sperms is: Rete testis → Efferent ductules → Epididymis → Vas deferens.
- (10.) (a.) In the given figure: A Vas deferens, B Seminal vesicle, C Prostate, D Bulbourethral gland.
- (11.) (d.) Urethra is not an accessory duct of male reproductive system. It originates from the urinary bladder and extends through the penis to its external opening.
- (12.) (a.) The ejaculatory duct transports the sperms to the outside through urethra. This urethra extends through the penis to its external opening called urethral meatus.
- (13.) (c.) Urethral meatus refers to the external opening of the urinogenital duct.
- (14.) (b.) Sertoli cells provide nutrition to the developing germ cells. Leydig cells secrets testicular hormones. Epididymis in the male sex accessory duct. Urethral meatus in the external opening of the urethra.
- (15.) (a.) Penis is the male external genitalia. It is made up of special tissue that helps in the erection of the penis to facilitate insemination. The enlarged end part of penis is called glaus penis. This glans penis is covered by a loose fold of skin called foreskin. Urethral meatus is the external opening of urethra.
- **(16.) (b.)** Seminal vesicle, prostate and bulbourethral glands are male accessory glands, whereas ampulla is the wider part of the oviduct. This oviduct is a part of female reproductive system.
- (17.) (b.) The fluid part of the semen, i.e., seminal plasma is contributed by seminal vesicle, prostate and bulbourethral gland. This seminal plasma is rich in fructose, calcium and certain enzymes.
- (18.) (c.) Among the given statements, statement II is incorrect about seminal plasma. It is rich in fructose instead of sucrose.
- **(19.)** (**d.**) Among the given statements, only statement III is incorrect. Each testis has about 250 testicular lobules instead of 350. Therefore, option III is correct.
- **(20.)** (a.) The scrotum helps in spermatogenesis by keeping the temperature of testes 2–2.5°C lower than the normal internal body temperature. It is necessary for spermatogenesis.

- **(21.) (b.)** The penis is the male external genitalia. The enlarged end of penis, glans penis, is covered by foreskin. This foreskin is a loose fold of skin.
- (22.) (c.) Ovaries are the primary female sex organs.
- (23.) (b.) Sertoli cells are the part of male reproductive system.
- (24.) (d.) Both (a) and (b), i.e., Fallopian tube and vagina constitute the female accessary ducts.
- (25.) (a.) Infundibulum is the funnel-shaped part of Fallopian tube that remains closer to the ovary.
- (26.) (b.) Isthmus is the part of the oviduct that joins the uterus.
- (27.) (a.) Womb is the alternate name of uterus.
- (28.) (c.) Endometrium is the inner glandular layer that lines the uterine cavity.
- **(29.)** (b.) Endometrium is the uterine layer that undergoes cyclical changes during menstrual cycle.
- (30.) (c.) Myometrium exhibits strong contractions during delivery of the baby.
- (31.) (d.) All of these, i.e, mons pubis, labia majora and clitoris are parts of female external genitalia.
- (32.) (a.) Hymen is the membrane that partially covers the opening of the vagina.
- (33.) (c.) Clitoris is the tiny finger-like structure which lies at the upper junctions of the two labia minora.
- **(34.) (b.)** 15–20 mammary lobes are found in each breast.
- (35.) (a.) The alveoli of mammary glands open into mammary tubules.
- (36.) (b.) The milk is sucked out through lactiferous duct.
- (37.) (a.) Ovaries are the primary female sex organ. These produce ovum as well as secrete several steroid hormones. Fimbriae are finger like projections found at the edges of infundibulum of Fallopian tubes. They help in the collection of ovum after ovulation. Myometrium is the middle thick layer of smooth muscles. It exhibits strong contractions during delivery of baby. The cells of alveri of mammary glands secrete milk.
- (38.) (b.) The wall of the uterus has three layers of tissue. The external thin membranous layer is known as perimetrium. The myometrium is the middle thick layer of smooth muscles. It exhibits strong contraction during delivery of baby. Endometrium is the inner glandular layer of uterus. It undergoes cyclical changes during menstrual cycle.
- (39.) (a.) Mons pubis, labia majora, clitoris, hymen all are the parts of female external genitalia. Mons pubis is a cushion of fatty tissue covered by skin and public hair. The labia majora fleshy folds of tissue. Hymen is a membrane that partially covers the opening of vagina. The clitoris is a tiny finger like structure which lies at the upper junction of the two labia minora.
- **(40.) (b.)** The finger like projections of infundibulum, i.e., fimbriae help in the collection of ovum after fertilisation.
- (41.) (c.) Statement III is wrong. Cervix, along with vagina, forms the birth canal.
- (42.) (b.) The milk secreted by cells of alveoli is stored in their (alveoli) lumen.
- (43.) (a.) Ovaries are the primary sex organs as they produce female gamete, i.e., ovum.
- (44.) (c.) Ovary is the primary sex organ. It is not a part of accessory ducts.
- (45.) (b.) The uterus opens into vagina. The cavity of cervix is known as cervical canal.
- (46.) (c.) The labia minora are the paired structures under labia majora.
- **(47.) (d.)** The alveoli of mammary lobes open into mammary tubules. Several mammary ducts join to form a wider mammary ampulla which is connected to lactiferous duct. The milk is sucked out through this lactiferous duct

- **(48.)** (a.) The process of producing gametes by primary sex organs is known as gametogenesis. Spermatogenesis is the process of sperm production, while oogenesis is the production of ovum.
- **(49.)** (a.) The immature, diploid male germ cells that produce sperms are spermatogonia. Rest of the cells, i.e., secondary spermatocytes, spermatids and spermatozoa are haploid in nature.
- **(50.) (b.)** The spermatogonia are diploid cells during gametogenesis. They have 46 (2n) chromosomes.



