	DAV PUBLIC SCHOOL, POKHARIPUT. BHUBANESWAR-20 POST SUMMER VACATION TEST CLASS - XII SUB : BIOLOGY	
	Time : 1.5 HoursMaximum Marks : 35	
	General instruction:	
	i. All questions are compulsory.	
	 ii. The question paper consists of four sections A, B, C, D and E. Section A contains 8 questions of 1 mark each(MCQ and A/R type), Section B contains 1 question of 2 marks (case bsed), Section C contains 4 questions(SA-I type) of 2 marks each ,Section D contains 3 questions(LA-I) of 3 marks each and Section –E contains 1 question of 5 marks . 	
	iii. There is no overall choice. Wherever necessary, the diagrams drawn should be neat and properly labeled.	
	SECTION-A	
1	Match the following columns and select the correct	1
	option.Column-IColumn-II(p) Placenta(i) Androgens(q) Zona pellucida(ii) Human Chorionic Gonadotropin (hCG)(r) Bulbo-urethral glands(iii) Layer of the ovum(s) Leydig cells(iv) Lubrication of thePenis(p)(q)(r)(a)(iii)(iv)(b)(iv)(iii)(c)(i)(iii)(d)(iii)(iv)	
2	The body of the ovule is fused within the funicle at:(a) Chalaza(b) Hilum(c) Micropyle(d) Nucellus	1
3	 (c) Metopyte (d) Notestian No new follicles develop in the luteal phase of the menstrual cycle because (a) Follicles do not remain in the ovary after ovulation (b) FSH levels are high in the luteal phase (c) LH levels are high in the luteal phase (d) Both FSH and LH levels are low in the luteal phase 	1
4	 (a) Dotal PSP and PSP are low in the latent phase Which of the following is a correct statement? (a) IUDs once inserted need not be replaced. (b) IUDs are generally inserted by the user herself (c) IUDs increase phagocytosis of sperms in the uterus. (d) IUDs suppress gametogenesis. 	1
5	Which of the following hormones is responsible for both the milk ejection reflex and the foetal ejection n reflex ?(a) Estrogen(b) Prolactin(c) Oxytocin(d) Relaxin	1
6	In the following question, a statement of assertion is followed by a statement of	1
	reason.	

	Mark the correct choice as:	
	(a) If both Assertion and Reason are true and Reason is the correct explanation of Assertion.	
	(b) If both Assertion and Reason are true but Reason is not the correct explanation of Assertion.	
	(c) If Assertion is true but Reason is false.	
	(d) If both Assertion and Reason are false.	
	<i>Assertion</i> : In some speies of asteraceae and poaceae, seeds are formed without fertilization.	
	<i>Reason</i> : Formation of fruit without fertilization is called parthenocarpy.	
7	<i>Assertion</i> : Upto morula stage, the cells divide without any increase in size. <i>Reason</i> : Zona pellucid remainsintact till cleavage	1
8	Assertion: Viviparous animals give better protection to their offsprings.	1
	<i>Reason</i> : They lay their eggs in the safer places in the environ ment.	
	SECTION-B	
9.	The following is the illustration of the sequence of ovarian events (a to i) in a	5
	human female:	
	• • • • • • • • • • • • • • • • • • • •	
	a b c d e f g b i	
	 (a) Identify the figure that illustrates ovulation and mention the stages of oogenesis it represents. 	
	(b) Name the ovarian hormone and pituitary hormone that have caused the above mentioned event .	
	(c) Specify the endocrine function of corpus luteum. How does it influence the	
	uterus ? Why is it essential?	
	(d) Explain the changes that occur in the uterus simulteneaously in	
	anticipation.	
	SECTION-C	1
10	These pictures show the gynoecium (A) papaver and (B) michelia flowers . Write the difference in the structure of their ovaries .	2

11	Differentiate between trophoblast and morula.	2		
12	What is amniocentesis? Justify the statutory ban on it.	2		
13	A moss plant is unable to complete its life-cycle in a dry environment. State two reasons.	2		
	SECTION-D			
14	State what is apomixis. Comment on its significance. How can it be commercially used?	3		
15	Make a list of any three out breeding devices that flowering plants have developed and explain how they help to encourage cross-pollination.	3		
16	 i) Draw a sectional view of seminiferous tubule of a human . Label the following cells in the seminiferous tublule: a) Cells that divide by mitosis to increase their number . b) cells that undergo Meiosis I. c) cells that undergo Meiosis II d)cells that help in the process of spermatogenesis . ii) Mention the role of Leydig cells . 	3		
	SECTION-E			
17	(a) Where does fertilization occur in humans? Explain the events that occur during this process	5		
	(b) A couple where both husband and wife are producing functional gametes, but the wife is still unable to conceive, is seeking medical aid. Describe any one method that you can suggest to this couple to become happy parents.			