Indian School Al Wadi Al Kabir
Unit Test (2025-2026)

Class: XII | Subject: Biology(044) | Max. marks: 30
Date: 26/05/2025 | SET- I | Time: 1 hour

MARKING SCHEME

SECTION A		
Q.NO.	QUESTIONS	MKS
1	d) (i), (iii) and (iv)	1
2	c. Autogamy and Geitonogamy	1
3	b. In implantation	1
4	c. Autosomal dominant trait	1
5	A) a-(ii), b-(iii), c-(iv), d-(i)	1
6	a. D-sporogenous tissues, E-Tapetum	1
7	b. Both assertion and reason are true, but the reason is not the correct explanation of the assertion	1
8	c. Assertion is true but reason is false	1
SECTION B		
9	(a) VvAA X VvAA and (b) VvAa X vvaa	1 1
10	i)Both parents are carriers of the disease- don't suffer from the disease ii)Chromosome 16-two linked gene HABI & HAB11 + Chromosome 11 -gene HBB+ quantitative disorder- the quantity of Hb produced depends on the no. of alleles mutated OR a)-X-linked recessive trait+ absence of a protein required for clotting from a cascade of proteins. b) female can get it from a diseased father and a carrier mother, males die before puberty.	½ 1.5 1 1
SECTION C		
11	a) Downs syndrome b) Trisomy of the 21st chromosome. c) any two identifying features d) i-XO type ii- XY type	½ ½ 1 ½ ½
12	a) neat and labelled diagram of an anatropous ovule. b) any one difference. OR a) diagrams illustrating the formation of a mature embryo sac. b) (i) Microspore mother cells required-80 (ii) Total number of meiotic divisions required to produce the microspores and the megaspores- 400	2 1 2 ½ ½
13	a) foetal stage b) corpus luteum+ secretes progesterone. b) ovulation c) Tertiary follicle+ any two important features.	½ 1 ½ 1
SECTION D		
14	a) Metabolic activities slow down, favourable conditions or maturity b) any two advantages of a seed.	1 1

	c) seeds formed without fertilisation, apomictic seeds- retain their hybrid characters and affordable to farmers OR d) i. any one difference ii. perisperm-remnants of the nucellus+ pericarp- fruit wall	2 1 1
	SECTION E	
15	a) Germ cell-spermatogenesis+ Sertoli cell-nutrition to the spermatogonia+ Leydig cells-androgens. b) seminiferous tubule-rete testis-vasa efferentia-epididymis-vas deferens- loops over the urinary bladder-secretions from the glands-ejaculatory duct -urethra. c) Head-DNA+ middle piece-mitochondria for energy+ tail-movement OR a) flow chart showing illustration. b) Chorionic villi interdigitating with the maternal blood vessels and tissues+ hCG and hPL and why is it also referred to as an endocrine tissue. c) Foetus and placenta+ Oxytocin	1.5 2 1.5 2 2 1