

Qn. No	Sub Qns	Answer Key/Value Points	Score	Total Score
9.	(a) (b) (c) (d)	Mucosa Associated Lymphoid tissue Enzyme linked Immuno sorbent Assay National AIDS Control Organisation cell mediated Immunity.	$\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$	2
10.		Avoid undue peer pressure Education and Counselling seeking help from parents and peers Looking for danger signs seeking professional & medical help. (Any four)	$\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$	2
11.	(a) (b) (c)	Miller's experiment / Urey-Miller's Expt S.L. Miller / Harold Urey chemical evolution was more or less accepted / Experimental proof for chemical evolution / supportive evidence for Oparin - Haldane Theory / Expt'l proof biochemical evolution	$\frac{1}{2}$ $\frac{1}{2}$ 1	2
12.	(a) (b) (c) (d)	Thalassemia - (iii) autosomal linked recessive blood disease. Haemophilia - (iv) sex linked recessive disease. Down's syndrome - (v) Trisomy 21. Klinefelter's syndrome - (i) Gynaecomastia.	$\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$	2
13.	(a) (b)	Myometrium - middle thick layer of smooth muscle in the wall of Uterus / exhibits strong contractions during delivery of the baby. Endometrium - inner glandular layer of uterus / undergoes cyclic changes during menstrual cycle. Spermatogenesis - the process of formation of sperm in testis Oogenesis - the process of formation of mature ovum in females	$\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$	2

(Any 2 relevant differences carry 1 score)
(2 of 4)

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14.		Dryopithecus → Ramapithecus → Australopithecus → Homo habilis → Homo erectus → Neanderthal man → Homo sapiens.	4 × 1/2	2
15.		A - Fungus B - Acetobacter aceti C - Bacterium D - Lactic acid.	4 × 1/2	2
16.	(a)	Meselson and Stahl's experiment	1	2
	(b)	The experiment had proved that DNA replicates semi-conservatively.	1	
		III. Answer any three Qns. from 17 to 20. Each carries 3 score.		
17.	(a)	Sexually Transmitted Infections	1	3
	(b)	Gonorrhoea, syphilis, genital herpes, chlamydiasis, Genital warts, Trichomoniasis, Hepatitis - B, AIDS etc. (any two egs.)	2 × 1/2 = 1	
	(c)	Avoid sex with unknown partners / multiple partners Always try to use condoms during coitus. In case of doubt, one should go to a qualified doctors for early detection and get complete treatment if diagnosed with infection. (Any two)	2 × 1/2 = 1	
18.	(a)	Alec Jeffreys	1	3
	(b)	Variable Number of Tandem Repeats	1	
	(c)	in forensic applications, Paternity testing in case of disputes, in determining populations and genetic diversities, etc. (Any two correct response)	1	

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19.	(a)	Typhoid	$\frac{1}{2}$	3
	(b)	sustained high fever (39° to 40° c) Weakness, stomach pain, Constipation, Headache, loss of appetite. (any three)	$3 \times \frac{1}{2}$ $= 1\frac{1}{2}$	
	(c)	Maintenance of personal and public hygiene/ consumption of clean drinking water, food, vegetables etc. / proper disposal of waste and excreta / periodic cleaning and disinfection of water reservoirs, pools, cesspools, tanks / Observing standard practices of hygiene in public catering. etc (any two)	$2 \times \frac{1}{2}$ $= 1$	
20	(a)	Habitat loss and fragmentation, Over exploitation Alien species invasion Co-extinction	$4 \times \frac{1}{2}$ $= 2$	3
	(b)	In situ conservation & ex situ conservation.	$2 \times \frac{1}{2}$ $= 1$	
Leader	1	Bashery S HSS T 2nd year LMHS 11/04 7736486658	8	9
	2	Joju Wilson. P HSS Zoology CHALAVARA H.S 9447735905	8	9
	3	Mohammed Ibrahim T 233299 MES HSS 9400933976 Ponnani	8	9
	4	Rajesh Kumar. R (704070) 8281493163	8	9
	5	SHANTO MATHEW (413035) 9447640159	8	9
	6	Rekha.k. (210525) 9447968299	8	9