

MODEL EXAMINATION-FEBRUARY 2015

BIOLOGY –ANSWER KEY

STD 10 MAX MARKS 40

QN NO	SCORING INDICATORS	SPLIT UP SCORE	TOTAL SCORE										
1	(a) THALAMUS (b)ALEXANDER FLEMMING	1 1	2										
2	(a) ETHYPHONE (b)NEURON	1 1	2										
3	JOHANNSEN	1	1										
4	a)ALZHEIMER b)CONTINUOUS DEGENERATION OF NEURONS IN BRAIN.	1/2 1/2	1										
5	a)HAEMOGLOBIN HAS MORE AFFINITY TO CARBON MONOXIDE THAN TO OXYGEN. SO CARBON MONOXIDE COMBINES WITH HAEMOGLODIN TO FORM CARBOXYHAEMOGLOBIN. IT DISSOCIATES VERY SLOWLY b)TAR,NICOTIN,CARBON MONOXID, BENZOPYRIN (ANY TWO)	1 1/2+1/2	2										
6	a)PUPIL DILATES, TRACHEA DILATES, GLYCOGEN IS CONVERTED TO GLUCOSE, PERISTALSIS SLOW DOWN, RATE OF HERAT BEAT INCREASES ETC. (ANY TWO ACTIONS OF SYMPATHETIC SYSYTEM) b)URINARY BLADDER CONTRACTS, FUNCTION OF STOMACH IS STIMULATED, SECRETION OF SALIVA INCREASES, RATE OF HEART BEAT DECREASES ETC (ANY TWO ACTIONS OF PARASYMPATHETIC SYSYTEM)	1 1	2										
7	EXPALIN THE CONDITION WITH STRUGGLE FOR EXISTENCE, SURVIVAL OF FITTEST, FAVOURABLE VARIATIONS, NEW SPEICES	2	2										
8	TSH – THYROID GLAND – STIMULATES THYROID GLAND GLUCAGON – LIVER, MUSCLES, LIPID TISSUES - INCREASES BLOOD GLUCOSE LEVEL WHEN IT IS LOWERED VASOPRESSIN – KIDNEYS – WATER LOSS IS CONTROLLED OR (a)RELEASING HORMONE (b)PITUITARY GLAND (c) STIMULATING HORMONE (d) GTH (e)THYROID (f) ADRENAL	1/2+1/2 1/2+1/2 1/2+1/2 1/2+1/2+1/2 1/2+1/2+1/2	3										
9	<table border="1"> <thead> <tr> <th>VACCINE</th> <th>DISEASES</th> </tr> </thead> <tbody> <tr> <td>BCG</td> <td>TUBERCULOSIS</td> </tr> <tr> <td>TT</td> <td>TETANUS</td> </tr> <tr> <td>COWPOX VIRUS</td> <td>SMALL POX</td> </tr> <tr> <td>SALK VACCINE</td> <td>POLIO</td> </tr> </tbody> </table>	VACCINE	DISEASES	BCG	TUBERCULOSIS	TT	TETANUS	COWPOX VIRUS	SMALL POX	SALK VACCINE	POLIO	1 (HEADING) 1/2+1/2 1/2+1/2	3 (SCORE CHANGE FROM QUE)
VACCINE	DISEASES												
BCG	TUBERCULOSIS												
TT	TETANUS												
COWPOX VIRUS	SMALL POX												
SALK VACCINE	POLIO												
10	YES TASTE BUDS OF SWEETNESS ARE MORE SEEN AT THE TIP OF TOUNGE	1 1	2										
11	(a) RADHA - NEPHRITIS, GEETHA – KIDNEY STONE (b) NEPHRITIS – STREPTO COCCUS INFECTION, INFECTION OF URINARY BLADDER, AUTO IMMUNE DEFICIENCY SYNDROME (ANY TWO) KIDNEY STONE – CALCIUM OXALATE , CALCIUM PHOSPHATE GET SEDIMENTED IN THE KIDNEY AND URETER AS GRAINS	1/2+1/2 1 1	3										
12	(a)PADDY (b) A- FUNGUS , C- BACETRIA (c) TRANSMITTED BY PESTS VIZ., APHIDS	1 1+1 1	4										

QN NO	SCORING INDICATORS	SPLIT UP SCORE	TOTAL SCORE
13	(a)DIABETES MELLITUS (b) INSULIN (c) PRODUCTION OF INACTIVE INSULIN, DEGENERATION OF BETA – CELLS , INACTIVITY OF INSULIN RECEPTORS	$\frac{1}{2}$ $\frac{1}{2}$ 1	2
14	MAN HAS MASTERED THE SKILL TO CREATE VARIATIONS IN CHARACTER ARTIFICIALLY OFTEN MASS EXTINCTION OF ORGANISMS HAVE OCCURRED ON EARTH DUE TO NATURAL PHENOMENA, BUT NOW THERE ARE MANY ORGANISMS UNDER THREAT OF EXTINCTION DUE TO INTERFERENCE	1 1 1	3
15	(a) ii)DNA UNWINDS, i) RNA IS SYNTHESIZED, iv) RNA COMES OUT THROUGH NUCLEAR MEMBRANE , iii) RNA COMBINES WITH RIBOSOMES, vi) DIFFERENT AMINO ACIDS ARE FORMED , v)PROTEIN MOLECULE IS FORMED. (b) PROTEIN SYNTHESIS / GENE ACTION	$\frac{1}{2}$ (EACH FOR CORRECT ARRANGEMENT) 1	4
16	(a) DRAWING AND LABELING A- SEMICIRCULAR CANALS, B-COCHLEA , C- EUSTACHIAN TUBE (b) SEMICIRCULAR CANAL – BALANCING COCHLEA – HEARING EUSTACHIAN TUBE - REGULATE THE PRESSURE IN THE MIDDLE EAR	1 $\frac{1}{2} + \frac{1}{2} + \frac{1}{2}$ $\frac{1}{2} + \frac{1}{2} + \frac{1}{2}$	4