Roll Number		

SET **A**

INDIAN SCHOOL MUSCAT
SECOND TERM EXAMINATION
BIOLOGY (044)

CLASS: XI TERM 2 Max.Marks: 35

MARKING SCHEME

SET	QN.NO	VALUE POINTS	MARKS SPLIT UP
A	1	a) Daughter cells have equal number of chromosomes. b) Metaphase.	1+1
	2	a) Tripalmitin / fattyacid b) Cytoplasm c) PGA d) Auxin	½ x 4
	3	Cortical nephron and Juxtaglomedullary nephron with their definition.	1+1
	4	If a chemical process is affected by more than one factor, then its rate will be determined by the factor which is nearest to its minimal value: it is the factor which directly affects the process if its quantity is changed. Carbon dioxide	1+1
	5	Neither synthesis of sugar nor of ATP. Results in the release of CO2 with the utilization of ATP No synthesis of ATP or NADPH.	1+1
	6	Auxin - F W Went Gibberellic Acid – E Kurosawa Ethylene – Cousin Cytokinin - Miller	½ X 4
	7	Conservation of specific chromosome number. Increases genetic variability. The stage between two meiotic divisions	3x1
	8	Increase in length of the axis, improve shapes of fruits like apple, delay senescence, speed up malting process (any three relevant points) **OR** Light absorption Water splitting Oxygen release Formation of ATP, NADPH (any three)	3X1
	9	TV – volume of air inspired or expired during a normal respiration. 500ml RV – volume of air remaining in the lungs even after a forcible expiration. 1100-1200 ml.	1 ½ x 1 ½

OR

Oxygen is transported as oxyhaemoglobin (97%) and dissolved form in plasma (3%). In the alveoli oxygen binds with heamoglobin to produce oxyhaemoglobin as pO2 is high, pCO2, H+ concentration and temperature are low. On reaching tissues they dissociate as the conditions are reversed. (3x1marks)

10 Action potential. (1) 3
Stimulus/Na influx/ reversal of polarity (explanation 2)

11 Fibrin/fibrinogen/prothrombin/thrombin/thromobokinase 3

12 Physically associated with PSII / Inner side of the membrane of the thylakoid.
Povides electrons to PSII
APTase

13 a) Volume of blood pumped out by each ventricle per minute and averages 5L in a healthy individual. 1+2+1+1
b) SAN/ can generate the maximum number of action potentials.
c) Tricuspid valve
d) Unique vascular connection between the intestine and liver

OR

a)
A- Second messenger / cyclic AMP or Ca++
B- Biochemical response 1 ½ +1 ½+ ½
C- Physiological response X 4

b)
(i) Oxytocin
(ii) Melatonin
(iii) PTH

c) Gastrin, secretin, CCK, GIP

Roll Number		

SET **B**

INDIAN SCHOOL MUSCAT
SECOND TERM EXAMINATION
BIOLOGY (044)

CLASS: XI TERM 2 Max.Marks: 35

MARKING SCHEME

SET	QN.NO	VALUE POINTS	MARKS SPLIT UP
	2	a) Protein b) Mitochondria c) OAA d) GA	½ x 4
		OR	
		During the conversion of Glucose to Glucose,6-phosphate Fructose,6-phospate to Fructose 1,6-bisphosphate	
	4	a) Chromosome number becomes half b) Pachytene of Prophase 1	1+ ½ + ½
	8	Growth, identical genetic complement, nucleo-cytoplasmic ration, cell repair. (any three)	3x1
	9	VC- maximum volume of air a person can breathe in after a forced expiration. ERV,TV and IRV TLC – total volume of air accomodated in the lungs at the end of a forced inspiration. RV,ERV,TV and IRV	1 ½ + 1 ½
		OR	
		Oxygen is transported as oxyhaemoglobin (97%) and dissolved form in plasma (3%). In the alveoli oxygen binds with heamoglobin to produce oxyhaemoglobin as pO2 is high, pCO2, H+ concentration and temperature are low. On reaching tissues they dissociate as the conditions are reversed.	1+1+1

Roll Number		

SET **C**

MARKING SCHEME

SET	QN.NO	VALUE POINTS	MARK SPLIT

INDIAN SCHOOL MUSCAT
SECOND TERM EXAMINATION
BIOLOGY (044)

CLASS: XI TERM 2 Max.Marks: 35

1	Chromatids of a chromosome separate Homologous chromosomes separate	1+1
5	Carbohydrate, cytoplasm, Kranz anatomy, ABA OR During the conversion of Glucose to Glucose,6-phosphate Fructose,6-phospate to Fructose 1,6-bisphosphate	½ X 4
8	Rooting, flowering, apical dominance (any three) OR Light absorption Water splitting Oxygen release Formation of ATP, NADPH (any three)	3x1
9	FRC-Volume of air that will remain in the lungs after a normal expiration. ERV+RV VC – the maximum volume of air a person can breathe in after a forced expiration. ERV+TV+IRV ERV – Additional volume of air, a person can expire after forcible expiration. 1000-1100ml. OR Oxygen is transported as oxyhaemoglobin (97%) and dissolved form in plasma (3%). In the alveoli oxygen binds with heamoglobin to produce oxyhaemoglobin as pO2 is high, pCO2, H+ concentration and temperature are low. On reaching tissues they dissociate as the conditions are reversed.	3 1+1+1