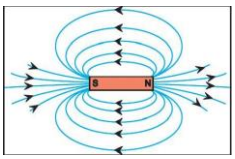
Roll Number		

SET **C**

INDIAN SCHOOL MUSCAT
SECOND PRE - BOARD EXAMINATION
SCIENCE 086

CLASS: X TERM 2 Max.Marks: 40

MARKING SCHEME			
SET	QN.NO	VALUE POINTS	MARKS SPLIT UP
	1	(a) Alcohol Homologous Series-1 Mark (b) $C_nH_{2n+1}OH$ (or) R-OH – 1 Mark	(1+1)
	2	(a) 18^{th} Group and 2^{nd} Period (½+½) (b) Increase- 1 Mark	(1+1)
	3	Spore formation is a mode of asexual reproduction in Rhizopus (bread mould). When a slice of bread is kept in moist dark place for a few days, spores of Rhizopus present in air settle on the bread to form bread mould (Rhizopus). It has a knob like structure which is involved in reproduction called sporangia, containing spores that develop into new Rhizopus. Advantages : It is a faster mode of reproduction. Off springs produced are identical.	1 ½ +1/2
	4	1.No 2.Placenta 3. Gonorrhea and Syphilis	½ ½ 1
	5	The transmission of characteristics from one generation to another is known as heredity. Seed shape, pod colour (any relevant point) OR 1. Segment of DNA on a chromosome which carries information for the appearance of a particular character is called a gene. It helps in the inheritance of the character from one generation to another. So, we can say that changes in gene can be brought about by change in DNA. 2. The type of sex chromosome contributed by the male gamete determines the sex of an infant. Since the ratio of male gametes containing X chromosome and those containing Y chromosome is 50: 50, the statistical probability of male or a female infant is also 50: 50.	1 ½ +1/2 1 1
	6	(a) Diagram of uniform magnetic field (b) Any two properties of magnetic lines OR a) The magnetic field lines never intersect each other because if two or more lines intersect each other than it means that at that point	1 1 1

		of intersection, the magnetic field has two directions at the same point, which is not possible. b) 	1
	7	1.Hawk Bio magnification. 2. In a food chain energy moves progressively through the various trophic levels and is no longer available to the organisms of the previous trophic level. Or 1. When CFCs reach the upper layers of atmosphere, they cause depletion of ozone layer and allow harmful UV radiations to reach the surface of the earth to create health hazards. 2. Skin cancer , Cataract	½ ½ 1 1 ½ +1/2
	8	(a) B (b) B (c) D (d) C (or) E (e) F (f) DB_2 (½ + ½ + ½ + ½ + ½ + ½) Mark	(½ + ½ + ½ + ½ + ½ + ½)
	9	(a) Alkene- ½ Mark (b) C_nH_{2n}- ½ Mark, C_4H_8- ½ Mark C_7H_{14}- ½ Mark (c) Double and Single Bonds- (½ + ½) Mark. (or) (a) Alkane- ½ Mark Reason-½ Mark (b) P,Q, R (or) C_3H_8, C_4H_{10}, C_5H_{12} - (½ + ½ + ½) mark (c) Any one character- ½ Mark	(½ + 1½ +1) (or) (1 +1½+½)
	10	1. Tall plants 2. 3: 1 3 Dwarf Reason: Being a recessive trait, dwarfness can only be expressed in the recessive homozygous condition or in the absence of dominant trait.	1 ½ ½ 1
	11	a) Watt. 1W is defined as the amount of electrical energy consumed per unit time. b) E=P x t Total energy E =500 x 7 +300 x 9 = 3500 + 2700 = 3.5 + 2.7 kWh = 6.2 kWh Cost of electricity bill = E x n x unit price = 6.2 x 30 x 6.50 = Rs. 1209/-	½ ½ ½ ½ ½ ½
	12	(a) high resistivity and high melting point (b) Circuit Diagram Derivation of effective resistance of parallel combination	1

		OR (a) ohm-m (b) R = 4.8 ohm Total resistance = 4.8 + 7.2 = 12 ohm I = V/R = 6/12 = 0.5 A	1+1 ½ ½ 1
	13	If we kill all the organisms in one trophic level, the following effects will take place: The population of organisms in the previous trophic level will increase. The organisms in the next trophic level will not be able to get the food, so they will migrate to some other ecosystem or die. It will cause an ecological imbalance in the food chain.	1 1 1
	14	a. To prevent unwanted pregnancies To control population rise or birth rate. b. Surgical methods Vas deferens is blocked in male. Fallopian tube/ oviduct is blocked in female. c. Warts and aids Using condoms on penis. OR Any method which prevents conception/ pregnancy is called contraception. They prevent sperm from meeting the ovum.	1 1 2
	15	(a) Deflection in galvanometer in one direction (b) Deflection in galvanometer in opposite direction. (c)Electromagnetic induction Electromagnetic induction is the process of inducing current in an electric circuit due to the change in the magnetic field. OR Fleming's right hand rule According to the Fleming's right hand rule, if we **hold our right-hand forefinger, middle finger and the thumb at right angle to each other**, then, if the forefinger represents the direction of the magnetic field, thumb represents the direction of motion of the conductor, then middle finger represents the direction of induced current.	1 1 1,1