SUCCESS KEY TEST SERIES

X (English)

(Unit test-4 Science-1 (Ch- 9,10))

Science And Technology - I-

TIME: 1 hrs

MARKS: 20

SEAT NO:

Q.1 A) Solve the following questions. **(2)**

1) Chandrayaan : moon : ..... : Mars

2) ..... contains carbon to carbon single bonds only.

B) Choose the correct alternative and rewrite the sentence **(3)**

1) On adding the pink coloured solution of potassium permanganate to ethanoic acid,
a. the pink colour completely dissapears
b. the pink colour diappears at first
c. the pink colour remains
d. the pink colour changes to orange.

2) Magnesium is a moderately active metal. Which is not true in the following?
a. It reacts with bromic acid to liberate hydrogen gas.
b. It reacts with ethanol and hydrogen gas is not liberated.
c. Magnesium has two valence electrons.
d. On combustion, magnesium forms a powder of MgO.

3) Which of the following astronauts travelled through space shuttle 'Discovery' first time?
a. Kalpana Chawala b. Rakesh Sharma c. Sunita Williams d. Neil Armstrong

Q.2 Solve the following questions. (Any two) **(4)**

1) The unsaturated compounds are more reactive than the saturated compounds.

2) Complete the statement and explain the following:
The Initial velocity of the Mangalyaan must be greater than …… from earth.

3) What does space debris consist of?

Q.3 Solve the following questions. (Any two) **(6)**

1) There are astronomical object orbiting planet of our solar system.

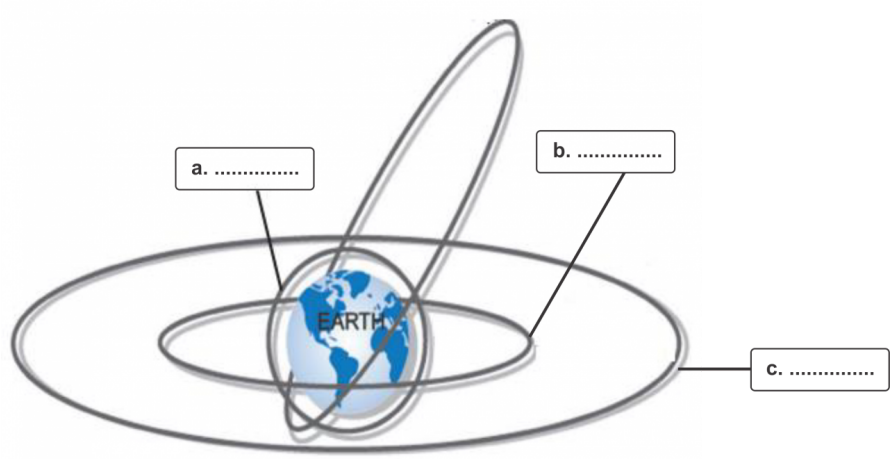
1. According to you, what that object is known as?

2. Is it possible for man to make this object? If yes, what is it called?

3. Explain in detailed about man made astronomical object.

2) How much time will the satellite take to complete one revolution around the earth?

3) Write the proper name of the orbits of satellites shown in the following figure with their height from the earth's surface.



Q.4 Solve the following questions. (Any one) **(5)**

1) Explain the following terms with example.
a. Structural isomerism b. Covalent bond c. Hetero atom in a carbon compound d. Functional group e. Alkane

2) Identify the type of the following reaction of carbon compounds.

i. $CH_3\text{-}CH_2\text{-}CH_2\text{-}OH \rightarrow CH_3\text{-}CH_2\text{-}COOH$
ii. $CH_3\text{-}CH_2\text{-}CH_3 \rightarrow 3\ CO_2 + 4\ H_2O$
iii. $CH_3\text{-}CH = CH\ \text{-}CH_3 + Br_2 \rightarrow CH_3\text{-}CHBr\ \text{-}\ CHBr\ \text{-}CH_3$
iv. $CH_3\text{-}CH_3 + Cl_2 \rightarrow CH_3\text{-}CH_2\text{-}Cl + HCl$
v. $CH_3\text{-}CH_2\text{-}CH_2\text{-}CH_2\text{-}OH \rightarrow CH_3\text{-}CH_2\text{-}CH{=}CH_2 + H_2O$
vi. $CH_3\text{-}CH_2\text{-}COOH + NaOH \rightarrow CH_3\text{-}CH_2\text{-}COO\text{-}Na^+ + H_2O$
vii. $CH_3\text{-}COOH + CH_3\text{-}OH \rightarrow CH_3\text{-}COO\text{-}\ CH_3 +\ H_2O$