AEROMODELLING

Q 1 Write the five name of materials used in Aeromodeling

Ans :- i) Woods ii) Dope iii) Cement iv) Putty v) Silver foil vi) Rubber bands ii) pins viii) Paint ix) Sand paper x) Fiber glass etc

Q 2 Write any five tools used in aero modeling

Ans :- i) Pliers ii) Hammer iii) Knife iv) Scale v) Soldering irons vi) Hand drill vii) Screw driver viii) RC set ix) Different kind of saw

Q 3 Write down the types of models in Aeromodelling.

Ans. (a) Static models (b) Gliders (c) Control line models (d) RC models

Q 4. Write down the types of Control line models in Aeromodelling.

Ans. (a) Control line Aerobatic model (b) Control line Speed model

Q 5. What is Aeromodelling? Name different types of aero models

Ans :- Aeromodelling is the art of making and flying miniature aircraft models in the exact proposition to the original aircrafts. Aeromodelling is one of the finest hobbies which are very popular worldwide among people of all ages and professions. It is the starting point of pilot and aero- nautical engineer. The main aim of aeromodelling in the NCC curriculum is to increase the air mindedness in the youth of our country. It is extremely thrilling for all, as by constructing the models by one's own hands, will make understanding of various principles of flight and problems of construction etc.

Different types of aero models are Static models, Gliders, Control line models, Radio control models , etc.

Q 6. What is the purpose of Doping?

Ans : Dope is a liquid which has celluloid and thinner as basic material . It is used for the following purpose:-

(a) For air proofing of surface.
(b) For tightening the surface skin by plasticizing effect.
(c) For making the aeromodel hardy and less vulnerable to weather conditions.

Q 7. Explain the Static Model and name two aircrafts which can be prepared as static models.

Ans. **Static Model**:-These are the miniature replicas of original aircrafts. The following aircrafts can be prepared as static models.

i. Fighter aircraft models
ii. Transport aircraft models
iii. Helicopter models

Q 8. Write down the types of Gliders in Aeromodelling.

Ans. **<u>Gliders:</u>** - These are the different types of gliders:-

(i) Chuck Glider
(ii) Catapult Glider
(iii) Towline Glider
(iv) Free flight Glider

Q 9. Name different types of Radio control models.

Ans. **<u>Radio control Models</u>: -**The following are the different types of RC model**:-**

(i) Radio Control Power
(ii) Radio Control Glider
(iii) Radio control Helicopter
(iv) Jet Powered Model

Q 10. Write down the General Safety codes to be observed before flying a Aeromodel.

Ans. **<u>GENERAL SAFETY CODE</u>**

(i) Cadet will not fly his/her model aircraft in competition or in the presence of spectators until it has been proven to be airworthy by having been previously successfully flight tested.

(ii) Cadet will not fly his/her model higher than approximately 400 feet within 3 miles of an airport without notifying the airport operator. Cadet will give right of way to and avoid flying in the proximity of full scale aircraft. Where necessary an observer shall be utilized to supervise flying to avoid having models fly in the proximity of full scale aircraft.

(ii) Where established, Cadet will abide by the safety rules for the flying site he/she use, and Cadet will not willfully and deliberately fly his/her models in a careless, reckless, and/or dangerous manner.

Q 11. Fill in the blanks.

(a) _____built first Helicopter model.(**Sir George Caley**)
(b) _____ was the first person to discover the lifting properties of cambered surface.(**Dr. Thomas Young**)
(c) _____ built a small spring operated model in 1842. (**John String fellow**).
(d) In 1878, _____builds a petrol driven model called 'Aerodrome No.5'.
(**Professor Langley**).
(e) _____ is who invented models fitted with tail surfaces and wings with dihedral angles (**Alphones Penand**).