

MAHARASHTRA STATE COUNCIL OF EXAMINATION, PUNE

Government Commercial Certificate Examination

4 JULY, 2018

[Time : 09-00]

(Total Marks for Sections I and II : 100)

ENGLISH TYPEWRITING

(50 Words Per Minute)

SECTION - II

[Time Allowed : 7 Minutes]

Note : Please do not type the 'Speed Passage' again.

Type the following speed passage in SEVEN MINUTES. Use DOUBLE or ONE and HALF LINE SPACING and a Margin of FIFTEEN SPACES on the left.

[Marks : 40]

The most powerful mother known to human beings is the rocket. It is the only one that can propel space craft to other planets and put satellites into orbit around the earth. Yet it is one of the easiest to understand, for even the giant space shuttle works on the same principles as the rockets you see at firework displays.

The toy firework was probably invented in China over 700 years ago. It has changed little since then. It is simply a tube filled with gunpowder packed very tightly. When the flame from the rocket's burning fuse reaches the gunpowder, there is a violent chemical reaction. Different substances in the gunpowder combine and turn into hot gases at high pressure.

They try to expand, and if the tube were closed at both ends, the gases would tear it a part. But there is an opening at the lower end of the tube, and the gases rush out, forming a bright glowing trail, called the exhaust.

It is the force generated by chemical reaction that pushes out the exhaust gases. But wherever a force is exerted on something, there is a reaction an equally strong force in the opposite direction. For example, when you fire a refile, you feel it kick against your shoulder. The gun is pushed back by the reaction to the force that drives the bullet forward. If you were standing on roller skates while carrying a heavy bag, and you were unwise enough to throw the bag away from you, you would find yourself rolling away in the opposite direction. The reaction to your throwing the bag would have given you an equal and opposite push. In the same way, the explosion of the gunpowder in the rocket tube not only pushes out the exhaust gases.
