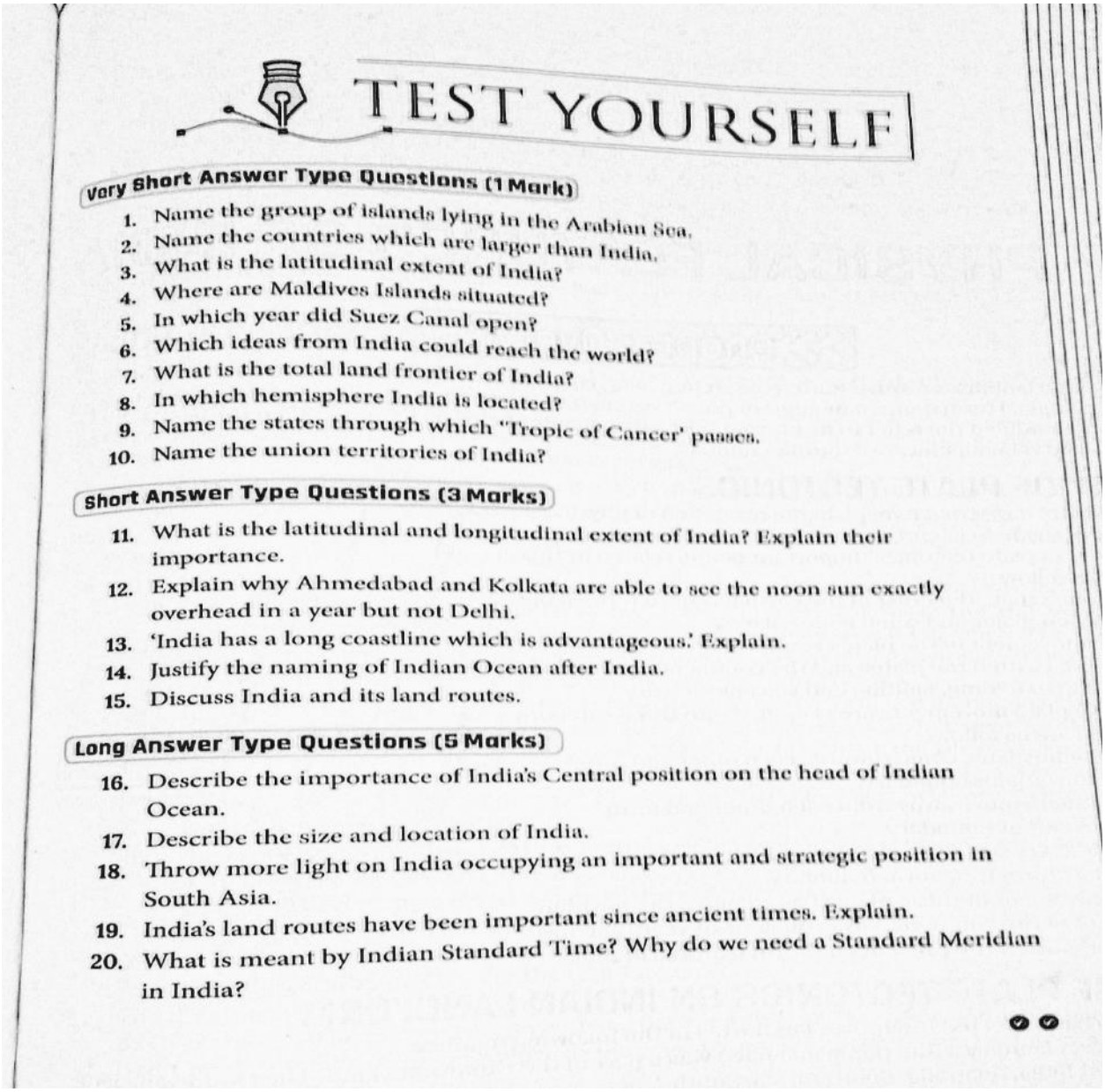
H.W. FOR CLASS-9 DATE 27/07/20

Social Science (Geography)

Ch- 1 India -Size and Location



TEST YOURSELF

Very Short Answer Type Questions (1 Mark)

1. Name the group of islands lying in the Arabian Sea.
2. Name the countries which are larger than India.
3. What is the latitudinal extent of India?
4. Where are Maldives Islands situated?
5. In which year did Suez Canal open?
6. Which ideas from India could reach the world?
7. What is the total land frontier of India?
8. In which hemisphere India is located?
9. Name the states through which 'Tropic of Cancer' passes.
10. Name the union territories of India?

Short Answer Type Questions (3 Marks)

11. What is the latitudinal and longitudinal extent of India? Explain their importance.
12. Explain why Ahmedabad and Kolkata are able to see the noon sun exactly overhead in a year but not Delhi.
13. 'India has a long coastline which is advantageous.' Explain.
14. Justify the naming of Indian Ocean after India.
15. Discuss India and its land routes.

Long Answer Type Questions (5 Marks)

16. Describe the importance of India's Central position on the head of Indian Ocean.
17. Describe the size and location of India.
18. Throw more light on India occupying an important and strategic position in South Asia.
19. India's land routes have been important since ancient times. Explain.
20. What is meant by Indian Standard Time? Why do we need a Standard Meridian in India?

Maths

(Class - 9) (Maths)

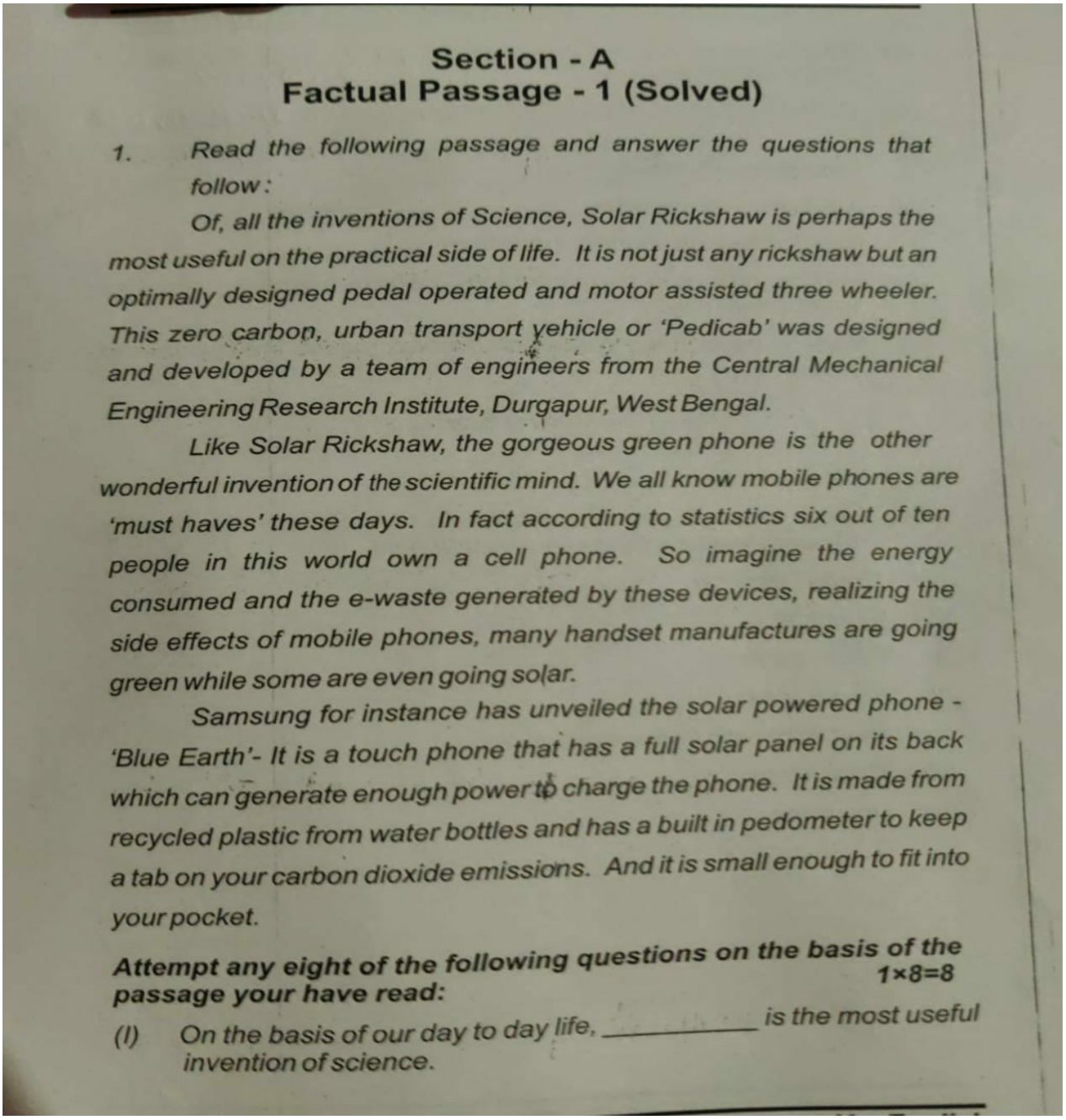
1. By actual division, find the quotient and the remainder when (x^4+1) is divided by $(x-1)$.
   Verify that remainder $= f(1)$.
2. Verify the division algorithm for the polynomials
   $p(x) = 2x^4 - 6x^3 + 2x^2 - x + 2$ and $g(x) = x + 2$.

Using the remainder theorem, find the remainder, when $p(x)$ is divided by $g(x)$, where

3. $p(x) = x^3 - 6x^2 + 9x + 3$, $g(x) = x - 1$.
4. $p(x) = 2x^3 - 7x^2 + 9x - 13$, $g(x) = x - 3$.
5. $p(x) = 3x^4 - 6x^2 - 8x - 2$, $g(x) = x - 2$.
6. $p(x) = 2x^3 - 9x^2 + x + 15$, $g(x) = 2x - 3$.
7. $p(x) = x^3 - 2x^2 - 8x - 1$, $g(x) = x + 1$.
8. $p(x) = 2x^3 + x^2 - 15x - 12$, $g(x) = x + 2$.
9. $p(x) = 6x^3 + 13x^2 + 3$, $g(x) = 3x + 2$.
10. $p(x) = x^3 - 6x^2 + 2x - 4$, $g(x) = 1 - \frac{3}{2}x$.
11. $p(x) = 2x^3 + 3x^2 - 11x - 3$, $g(x) = \left(x + \frac{1}{2}\right)$.
12. $p(x) = x^3 - ax^2 + 6x - a$, $g(x) = x - a$.
13. The polynomials $(2x^3 + x^2 - ax + 2)$ and $(2x^3 - 3x^2 - 3x + a)$ when divided by $(x-2)$ leave the same remainder. Find the value of a.
14. The polynomial $p(x) = x^4 - 2x^3 + 3x^2 - ax + b$ when divided by $(x-1)$ and $(x+1)$ leaves the remainders 5 and 19 respectively. Find the values of a and b. Hence, find the remainder when $p(x)$ is divided by $(x-2)$.

English

Note: Do this in language fair copy. Don't need to copy the passage.



Section - A
Factual Passage - 1 (Solved)

1. Read the following passage and answer the questions that follow :

Of, all the inventions of Science, Solar Rickshaw is perhaps the most useful on the practical side of life. It is not just any rickshaw but an optimally designed pedal operated and motor assisted three wheeler. This zero carbon, urban transport vehicle or 'Pedicab' was designed and developed by a team of engineers from the Central Mechanical Engineering Research Institute, Durgapur, West Bengal.

Like Solar Rickshaw, the gorgeous green phone is the other wonderful invention of the scientific mind. We all know mobile phones are 'must haves' these days. In fact according to statistics six out of ten people in this world own a cell phone. So imagine the energy consumed and the e-waste generated by these devices, realizing the side effects of mobile phones, many handset manufactures are going green while some are even going solar.

Samsung for instance has unveiled the solar powered phone - 'Blue Earth'- It is a touch phone that has a full solar panel on its back which can generate enough power to charge the phone. It is made from recycled plastic from water bottles and has a built in pedometer to keep a tab on your carbon dioxide emissions. And it is small enough to fit into your pocket.

Attempt any eight of the following questions on the basis of the passage your have read: 1×8=8

(I) On the basis of our day to day life, _____ is the most useful invention of science.

(ii) The Solar Rickshaw was designed by _____.

(iii) The scientific mind has also invented _____ in addition to the Solar Rickshaw.

(iv) Cell phones pollute the enviorment by generating _____.

(v) Solar powered phones keep the record of carbondioxide emissions with inbuilt _____.

(vi) A cell phone is owned by _____ people.

(vii) Blue Earth touch phone is made from _____.

(viii) Find the phrase in the paragraph 3, which means the same as 'watch attentively.

(ix) Find the word in the paragraph 3 which means the opposite of 'emissions'.

Science(Physics)

1- An object travels 16 m in 4 second then another 16 metre into 2 second what is the average speed of the object.

2- Usha swims in a 90m long pool.She cover 180 metre in 1 minute by swimming from one end to other end and back along the same straight path find the average speed and average velocity of Usha.

3- A car travel 40 kilometre in 30 minute and next 40 kilometre in 40 minutes calculate the average speed for the entire journey.

4- Body travels a distance of 10 km with a constant speed of 30 km per hour and then the next 40 km at a constant speed of 50 kilometre per hour find the average speed of whole journey.

5- Starting from a stationary position Rahul pedals his bicycle to attend a velocity of 6 metre per second in 30 seconds then he applies brakes such that velocity of the bicycle comes down to 4 metre per second in the next five second calculate the acceleration of bicycle in both cases.

6- An artificial satellite orbits in a circular path the height of the satellite from the surface of earth is 36000 km such a satellite is called geostationary satellite when the satellite is exactly ee vertically upward the ground station it sends a signal how much time will the signal take to reach the ground station the speed of signal is 3×10^8metre per second.