



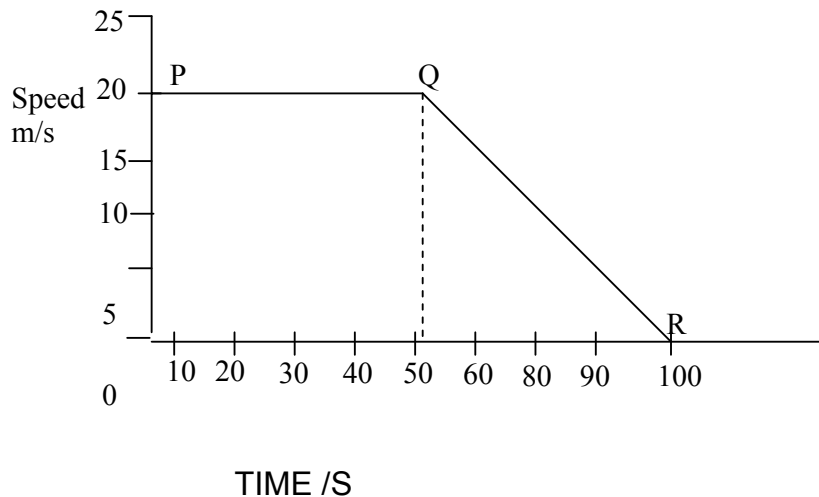
GRADE - X I. G. C. S. E.

HOMEWORK

FRIDAY, NOVEMBER 13, 2009

SCIENCE (PHYSICS)

1. State what is meant by the terms:-
 - (i) weight
 - (ii) density
2. A student is given a spring balance that has a scale in newtons. The student is told that the acceleration of free – fall is $10\text{m}/5^2$
 - (i) Describe how the student could find the mass of an irregular solid object.
 - (ii) Describe how the student could go on to find the density of the object.
- 3.



- a) Which part of the graph shows when the cyclist is traveling at constant speed
 - b) State what is happening during the rest of the journey shown in the graph.
 - c)
 - (i) Calculate the distance traveled during the first 50S.
 - (ii) Calculate the total distance traveled.
 - (iii) Calculate the average speed during the 100 s.
4. What is electromagnetic Induction?
 5. Which part (s) of an electric motor
 - (a) Connect the power supply
 - (b) Changes the current direction every half turn?
 6. What is the advantage of using an electromagnet in an electric motor, rather than a permanent magnet?

7. An electromagnet has a core.
 - a) What is the purpose of the core?
 - b) Why is iron a better material for the core than steel?
 - c) Write down ways of increasing the strength of the magnetic field from an electromagnet.
 - d) What is the purpose of the circuit breaker?
 - e) How do you think the performance of the circuit breaker would be affected if the coil of the electromagnet had more turns?
 - f) Name three non- magnetic metals.
8. If a light bulb has a power of 36W when connected to a 12V supply, what is the current through it?
9. If an electric heater takes a current of 4A when connected to a 230V supply what is its power?
10. What is ultra sound? Give two examples of the medical use of ultra sound.
11. Write a report on sound waves.

MATH

- Complete all exercises of Matrices and Loci discussed in the class.
- Prepare charts for the soft board. Topics are:-
 - (a) Trigonometry
 - (b) Volume and surface area of various 3-D solids
 - (c) Probability

ENGLISH

Read the following passage carefully, and then answer all the questions.

The writer, Bill Bryson, has just arrived in the island of Capri off the coast of Italy. Before this he has visited other cities in Italy where his experiences have not always been very pleasant.

Capri town was gorgeous, an infinitely charming little place of villas and tiny lemon groves and long views across the bay to Naples and Vesuvius. The heart of the town was a small square, the Piazza Umberto I, lined with cream-coloured buildings and filled with tables and wicker chairs from the cafes ranged around it. At one end, up some wide steps, stood an old church, dignified and white, and at the other was a terrace with an open view to the sea far below. 5

I cannot recall a more beguiling place for walking. The town consisted almost entirely of a complex network of white-walled lanes and passageways, many of them barely wider than your shoulders, and all of them interconnected in a wonderfully bewildering fashion, so that I would constantly find myself returning to a spot I had departed from in an opposing direction ten minutes before. Every few yards an iron gate would be set in the wall and through it I could glimpse a white cottage in a jungle of flowery shrubs and, usually, a quarry-tiled terrace overlooking the sea. Every few yards a cross-passageway would plunge off down the hillside or a set of steps would climb half-way to the clouds to a scattering of villas high above. 10

There were no roads at all, apart from the one leading from the harbour to the town and onward to Anacapri, on the far side of the island. Everywhere else had to be got to on foot, often an arduous trek. 15

Most of the shops lay beyond the church, up the steps from the central square, in yet another series of lanes and little squares of unutterable charm. They all had names like Gucci and Yves St Laurent, which suggested that the summertime visitors must be rich and insufferable, but mercifully most of the shops were still not open for the season, and there was no sign of the tourists who must make them prosper in the summer. 20

A few of the lanes were enclosed with the upper storeys of the houses completely covering the passageways. I followed one of these lanes as it wandered upward through the town and finally opened again to the sky in a neighbourhood where the villas began to grow larger and enjoy more spacious grounds. The path meandered and climbed, so much so that I grew breathless again and propelled myself onwards by pushing my hands against my knees, but the scenery and setting were so fabulous that I was dragged on, as if by magnets. Near the top of the hillside the path levelled out and ran through a grove of pine trees, heavy with the smell of rising sap. On one side of the path were grand villas – I couldn't imagine by what method they got the furniture there when people moved in or out – and on the other side was a giddy view of the island: white villas strewn across the hillsides, half buried in hibiscus and bougainvillea and a hundred other types of shrub. 25 30

It was nearly dusk. A couple of hundred yards further on the path rounded a bend through the trees and ended suddenly, breathtakingly, in a viewing platform hanging out over a precipice of rock – a little patio in the sky. It was a look-out built for the public, but I had the feeling that no one had been there for years, certainly no tourist. It was the sheerest stroke of luck that I had stumbled on it. I have never seen anything half as beautiful: on one side the town of Capri spilling down the hillside, on the other the twinkling lights of Anacapri and the houses gathered around it, and in front of me a sheer drop of – what? – 200 feet, 300 feet, to a sea of the lushest aquamarine blue washing against outcrops of jagged rock. The sea was so far below that the sound of breaking waves reached me as the faintest of whispers. A sliver of moon, brilliantly white, hung in a pale blue evening sky, a warm breeze teased my hair and everywhere there was the scent of lemon, honeysuckle and pine. 35 40

- 1 (a) From what we are told about the Piazza Umberto I in the first paragraph of the passage, give **three** reasons why people might enjoy a visit there.
- (b) Give **one** reason why it was not easy to go from one place to another on Capri.
- (c) Explain, using your own words, 'the upper storeys of the houses completely covering the passageways' (lines 22-23).
- (d) Give **two** facts about the path mentioned in lines 25-26.
- (e) Re-read the last two paragraphs of the passage, and then write a summary of what Bill Bryson saw as he climbed to the top of this path. (Write a paragraph of about 50-70 words.)
- (f) Re-read lines 6-10. Explain, using your own words, **two** of the difficulties Bryson encountered as he walked through the lanes.
- (g) State **two** things you learn about the visitors mentioned in paragraph 4, and explain, **in your own words**, what Bryson thinks about these visitors.
- (h) Re-read the final paragraph (lines 33-43), and then choose **three** words or phrases the writer uses to describe what he saw, heard and felt when he stood on the viewing platform. For each of your answers explain why the experience was very special to him.
- (i) In line 39 why do you think the writer puts '— what? —'?
- 2 Imagine you have just visited Capri. Your aunt and uncle, who are both fit and healthy, are thinking of going there for a holiday and have asked for your advice.

Write a letter to them in which you give your opinion as to how suitable a destination it would be for them.

Begin your letter 'Dear Aunt and Uncle' and include:

- what they might like about the island
- what they might not like there.

Base your ideas on what you have read in the passage, but do not copy from it.

You should write between 1 and 1½ sides, allowing for the size of your handwriting.

Read **Passage A** carefully, and then answer **Questions 1** and **2**.

Passage A

In this extract from a novel called The Great Gatsby, the narrator describes Gatsby's lavish parties. The story takes place in the 1920s.

There was music from my neighbour's house through the summer nights. In his blue gardens men and girls came and went like moths among the whisperings and the champagne and the stars. At high tide in the afternoon I watched his guests diving from the tower of his raft, or taking the sun on the hot sand of his beach while his two motor-boats slit the waters of the Sound, drawing aquaplanes over cataracts of foam. On weekends his Rolls-Royce became an omnibus, bearing parties to and from the city between nine in the morning and long past midnight, while his station wagon scampered like a brisk yellow bug to meet all trains. And on Mondays eight servants, including an extra gardener, toiled all day with mops and scrubbing-brushes and hammers and garden-shears, repairing the ravages of the night before.

Every Friday five crates of oranges and lemons arrived from a fruiterer in New York – every Monday these same oranges and lemons left his back door in a pyramid of pulpless halves. There was a machine in the kitchen which could extract the juice of two hundred oranges in half an hour if a little button was pressed two hundred times by a butler's thumb.

At least once a fortnight a corps of caterers came down with several hundred feet of canvas and enough coloured lights to make a Christmas tree of Gatsby's enormous garden. On buffet tables, garnished with glistening hors-d'oeuvre, spiced baked hams crowded against salads of harlequin designs and pastry pigs and turkeys bewitched to a dark gold. In the main hall a bar with a real brass rail was set up, and stocked with gins and liquors and with cordials so long forgotten that most of his female guests were too young to know one from another.

By seven o'clock the orchestra has arrived, no thin five-piece affair, but a whole pitful of oboes and trombones and saxophones and viols and cornets and piccolos, and low and high drums. The last swimmers have come in from the beach now and are dressing upstairs; the cars from New York are parked five deep in the drive, and already the halls and salons and verandas are gaudy with primary colours, and hair bobbed in strange new ways, and shawls beyond the dreams of Castile. The bar is in full swing, and floating rounds of cocktails permeate the garden outside, until the air is alive with chatter and laughter, and casual innuendo and introductions forgotten on the spot, and enthusiastic meetings between women who never knew each other's names.

The lights grow brighter as the earth lurches away from the sun, and now the orchestra is playing yellow cocktail music, and the opera of voices pitches a key higher. Laughter is easier minute by minute, spilled with prodigality, tipped out at a cheerful word. The groups change more swiftly, swell with new arrivals, dissolve and form in the same breath; already there are wanderers, confident girls who weave here and there among the stouter and more stable, become for a sharp, joyous moment the centre of a group, and then, excited with triumph, glide on through the sea-change of faces and voices and colour under the constantly changing light.

Suddenly one of these gypsies, in trembling opal, seizes a cocktail out of the air, dumps it down for courage and, moving her hands like Frisco, dances out alone on the canvas platform. A momentary hush; the orchestra leader varies his rhythm obligingly for her, and there is a burst of chatter as the erroneous news goes round that she is Gilda Gray's understudy from the Follies. The party has begun.

- 1 Imagine that you live near to Gatsby's house where the parties take place. You object to the parties for several reasons, including the lavish display of wealth.

Write a letter to the owner of the house, setting out your various objections and justifying each one by developing ideas and details from the passage.

You should write about 1½ to 2 sides, allowing for the size of your handwriting.

Begin your letter: Dear Mr Gatsby...

- 2 Re-read paragraphs 4, 5 and 6, which describe:

(a) the lights and the colours of the party

(b) the sounds of the party.

By referring closely to the language used by the writer, explain how he makes these descriptions effective.

Read **Passage B** carefully, and then answer **Question 3**, which is based on both **Passage A** and **Passage B**.

Passage B

Sophia is twelve and lives in Kingale, Rwanda. Her parents are both dead. Sophia looks after her two sisters so that most of her family can stay together. Their brother, Beaufirs, lives with Sophia's grandparents.

A life in the day of Sophia Ingibire Tuyisenge

If I wake up during the night I always look up at the hole in the tin roof. If I cannot see it I know I can go back to sleep, but if it is getting light then it is nearly time to get up. My sisters, Solange, who is three, and Claudette, who is eleven, and I all sleep in the same bed since our mother died.

Sometimes Solange wakes me up in the middle of the night to tell me what she's been dreaming about, or that she wants to go to the toilet. But of course then we have to go outside, so I try to persuade her to go back to sleep.

Our house is at the top of a steep hill, next to several other houses, with a small latrine. It has two rooms. In the back room, where we sleep, I keep our food in old rice sacks and our clean clothes in plastic bags that are hanging above the floor, so they don't get wet when the rain comes through. Even in daytime, our bedroom is very dark, so first thing I light a paraffin lamp. Then either Claudette or I will climb down the hill with jerry cans to get some water from the pump. It is heavy carrying them back, and when it is raining the ground gets muddy, so you can slip all over the path. When we've got water we make porridge, which we eat out of plastic mugs, sitting around the table in the front room.

Then Claudette goes to school while I clear up. I wash the mugs, then sweep and scrub the floor. Of course, Solange has to help too, and she can be very noisy, as she copies me, shouting and laughing and brushing away. She can be quite a handful, and she wants to be carried all the time. Sometimes I wish she would stop chattering and making so much noise. But she is our little sister and we love her very much. We are so pleased not to be separated from her. Really, I am Solange's mother now.

While Claudette is at school I give Solange a bath. I take the basin outside, pour in the water, and Solange jumps in. I wash her hair and give her ears and her nails a good scrub while she splashes around. After I have dried her on my knee, I rub Vaseline into her skin, like my mother showed me.

Annunciata, a social worker, gives us flour for porridge, rice and some other dried foods. She is from a charity called Uyisenga. In the afternoon, I peel some potatoes or cook rice with cassava for the main meal of our day, which we eat about two o'clock, when Claudette comes home and before I go to school. Late afternoon we may play cards together, or I go down to the road and buy vegetables. Sometimes I go to the petrol station, where I buy two litres of paraffin. Solange often comes too, and she makes me carry her on my back for most of the way. Then I make a funnel and pour some of the paraffin into empty Fanta bottles. I sell them at the bottom of the path to our house, for 20 Rwandan francs (a tiny amount). The money I earn pays for our soap and vegetables.

Sometimes Solange chatters so much I try to persuade her to go to bed early with a biscuit. But mostly I am so tired, we go to bed at the same time. It is better if we do all go to bed together, because we don't waste our paraffin by lighting the lamp. Every night I think about my mother as I lie in bed. I miss her so much. She told us that we should be brave and we must look after our brother and little sister. She told us we should have no fear because God would look after us. We can see that is true: today, two years after she died, we are doing just fine.

3 Read **Passage B** and re-read **Passage A**.

Summarise the main features of the lifestyles described in **each** passage.

You should write about 1 side in total, allowing for the size of your handwriting.