1.	2.	3.	4.	5.
6.	7.	8.	9.	10.

III. Read the following passage and answer the questions that follow.(10p)

Joanne scanned the area around her, her small frame straining above the pile of wood. She had to wriggle her way through the wood and rubble. It did not matter where she tried, they were all the same. The holes were too small and she used all her might to remove the obstacles, pushing and shoving them out of the way, **the noise** ringing into the night. She was imprisoned. The silence was a far cry from the explosion moments ago. Afraid to be heard, she tried to be as quiet as possible. It was an impossible and ludicrous task. The destruction left behind by the men was far greater than their numbers. Their goals had probably been achieved. Those who did not escape were probably dead.

Telephone lines had been cut and lights had been **shut off** moments before the much feared raids began. Except for the cut-off in communication, there was nothing to indicate that the men would soon arrive. Under the cover of darkness, the more fortunate ones had managed to escape. Those near the border climbed through the holes in the fence, to seek refuge in the neighbouring country.

For weeks, the government had warned of an impending attack by the group. Initial **apprehension** turned to fear when the expected day arrived. However, when nothing happened, everyone thought that the government had made a mistake. After all, how often within that past year had they failed to deliver what had been promised to the citizens. First, the new lands promised to the farmers after the massive insect attacks were insufficient and each farmer had to contend with land that was one third their original size. Then, there was the promise of opening the economy to the international community, allowing many to sell their handicraft overseas but this never materialised. The people soon became angry as they were being deceived and complacency about the raids was abounding in the community.

The environment was ripe for the triad attack. No one noticed the men ambling into the town. What made their attack even more shocking was that the multitude of people returning from work and sitting down to a meal did not even notice the seven men walking past their windows. Military uniform had been a common sight in the town ever since the government's warning was announced. There was no need for these men to run or hide. No one had seen them. Joanne inched her foot out of a gap and half crawled, half walked ahead. Every step she took was painful. Mounted up by the lack of water for hours, the pain in her leg was **excruciating** and the more she walked, the more bodies she saw. Arms and legs were sticking out from under piles of rubble and sometimes a lifeless face could be seen among the debris. Everyone she saw was dead. Despite her situation, Joanne hoped that she would not be able to find any of her family members.

LIVEWORKSHEETS

Suddenly, she saw a movement among a pile of rubble. She ran the short distance forward, glad for any sign of life in the place. What she saw spurred her on and she pushed aside several pieces of wood and lifted an orange cloth, probably once a curtain. Groping about, she managed to locate the little body and using all her might, dragged it out. The child could have been more than five years old. He was covered in soot and his stomach heaved in and out in agony. His eyes were shut and only his breathing told her that he was still alive.

Joanne carried the child over her shoulder and squinted in the darkness, trying to locate her **bearings.** Her only hope was the border. Moments ago, she had wanted to forgo everything, thinking that it was probably better to lie in the darkness until it eventually overcame her and the feelings of loneliness would disappear. Now, she was encouraged to continue. If she could reach the border, she would be able to get help. Looking around, she ran in the direction of what looked like spots of bright yellow light.

7. What is not mentioned as a cause of the pain in Joanne's walk?

A. Her leg was then in physical agony.
B. She saw numerous dead bodies.
C. She walked in fear of the men approaching.
D. She was in need of being hydrated.

8. Which did not happen before the raids began?

A. The people were cut off from the outside world.
B. Militarily dressed men entered the town.
C. The small frames strained above the wood.
D. The people saw massive insect attacks.

*9. The word "**bearings**" in the last paragraph can be substituted by the term _____*

A. whereabouts B. collocations C. managements D. strengths

*10. What particular feeling led Joanne to the desire to "**forgo everything**" as mentioned in the last paragraph?*

A. The fright the shadows had given her.
B. The worry for her family members.
C. The fear that the men would come for her.
D. An intense feeling of loneliness.

Your answer

1.	2.	3.	4.	5.
6.	7.	8.	9.	10.

LIVEWORKSHEETS

IV. ***The reading has six paragraphs A-F. Choose the most suitable heading for paragraph B-F from the list of headings below. Write the appropriate numbers (i-x) in space 1-5. There are more headings than paragraphs, so you will not use them all.***

(10 points)

HIGH-TECH CRIME -FIGHTING TOOLS

A. Crime- fighting technology is getting more sophisticated and rightly so. The police need to be equipped for the 21st century. In Britain we've already got the world's biggest DNA databases. By next year the state will have access to the genetic data of 4.25 m people: one British-based person in 14. Hundreds of thousands of those on the database will never have been charged with a crime.

B. Britain is also reported to have more than £4 million CCTV (closed circuit television) camera, There is a continuing debate about the effectiveness of CCTV. Some evidence suggests that it is helpful in reducing shoplifting and car crime. It has also been used to successfully indentify terrorists and murderers. However, many people claim that better lighting is just as effective to prevent crime and that cameras could displace crime. An internal police report said that only one crime was solved for every 1,000 cameras in London in 2007. In short, there is conflicting evidence about the effectiveness of camera, so it is likely that the debate will continue.

C. Professor Mike Press, who has spent the past decade studying how design can contribute to crime reduction, said that, in order for CCTC to have any effect, it must be used in a targeted way. For example, a scheme in Manchester records every license plate at the entrance of a shopping complex and alerts police when one is found to belong to an untaxed or stolen car. This is an effective example of monitoring, he said. Most schemes that simply record city centers continually- often not being watched - do not produce results. CCTV can also have the opposite effect of that intended, by giving citizens a false sense of security and encouraging them to be careless with property and personal safety. Professor Press said: "All the evidence suggests that CCTV alone

LIVEWORKSHEETS

makes no positive impact on crime reduction and prevention at all. The weight of evidence would suggest the investment is more or less a waste of money unless you have lots of other things in place". He believes that much of the increase is driven by the marketing efforts of security companies who promote the crime-reducing benefits of their products. He described it as a "lazy approach to crime prevention" and said that authorities should instead be focusing on how to alter the environment to reduce crime.

D. But in reality, this is not what is happening. Instead, police are considering using more technology. Police forces have recently begun experimenting with cameras in their helmets. The footage will be stored on police computers, along with the footage from thousands of CCTV cameras and millions of pictures form numberplate recognition camera used increasingly to check up on motorists.

E. And now another type of technology is being introduced. It's called the Microdrone and it's a toy-sized remote-control craft that hovers above streets or crowds to film what's going on beneath. The Microdrone has already been used to monitor rock festivals, but its supplier has also been in discussions to supply it to the Metropolitan Police, and Soca, the Serious Organized Crime Agency. The drones are small enough to be unnoticed by people on the ground when they are flying at 350ft. They contain high-resolution video surveillance equipment and an infrared night vision capability, so even in darkness they give operators a bird's -eye view of locations while remaining virtually undetectable.

F. The worrying thing is, who will get access to this technology? Merseyside police are already employing two of the devices as part of a pilot scheme to watch football crowds and city parks looking for antisocial behaviors. It is not just about crime detection: West Midlands fire brigade is about to lease a drone, for example, to get a better view of fire and flood scenes and aid rescue attempt; the Environment Agency is considering their use for monitoring of illegal fly tipping and oil spills. The company

LIVEWORKSHEETS

that makes the drone says it has no plans to license the equipment to individuals or private companies, which hopefully will prevent private security firms from getting their hands on them. But what about local authorities? In theory, this technology could be used against motorists. And where will the surveillance society end? Already there are plans to introduce smart water containing a unique DNA code identifier that when sprayed on a suspect will cling to their clothes and skin and allow officers to identify them later. As long as high-tech tools are being used in the fight against crime and terrorism, fine. But if it's another weapon to be used to invade our privacy then we don't want it.

List of Headings

i	The spy in the sky	**vi**	Lack of conclusive evidence
ii	The spread of technology	**vii**	Cars and cameras
iii	The limitations of camera	**viii**	Advantages and disadvantages
iv	The cost of camera	**ix**	A natural progression
v	Robots solving serious crimes	**x**	A feeling of safety

Example: Paragraph A **ix**

1. Paragraph B _____ **2.** Paragraph C _____

3. Paragraph D_____ **4.** Paragraph E _____

5. Paragraph F _____

Your answer

1.	2.	3.	4.	5.

V. Read the passage carefully and do the exercise below. **(10 pts)**

THE CALL OF NATURE

One of the most popular characters in Dr. Who, a British television science-fiction series, was a robotic dog called K9. On June 1st science fiction became fact when Sony launched its latest product, Ambo. Described as "a one-of-a-kind artificially intelligent pal", Aibo is a dog that never needs to be walked, fed or washed. Nor does it make a mess or get into fights with other dogs. It has stereo microphones for ears, can recognize

LIVEWORKSHEETS

colours and shapes, and emits a variety of bleeps and chirps. A sensor in its head can distinguish between an amiable pat and a reproachful slap. And the pause button on his chest means it can be switched off and left in a cupboard when you go on holiday.

A good joke, and a profitable one (the first batch of 3,000 machines, priced at just over $2,000 each, sold out within 20 minutes). But behind the marketing spiel about Aibo's autonomous behavior patterns, simulated emotions and instincts, "lovable shape" and "four highly expensive legs", lurks a serious point. Aibo is merely the latest example of a robot inspired by biology.

This makes sense. Millions of years of evolution have already solved difficult design problems in locomotion, manipulation, sensing and navigation in almost every environment in which a robot might conceivably need to operate. Accordingly, a menagerie of "biomorphic" robots can now be found scuttling, squirming and swimming in laboratories all round the world.

For instance, several separate efforts are now under way to build robotic fish that could be used to locate mines or take environmental readings. Understanding how fish manage to swim so quickly but expend so little energy could also lead to new propulsion systems for ships and submarines. This may explain why Mitsubitshi Heavy Industries, a Japanese company whose activities include shipbuilding, has spent four years and $1m building an incredibly lifelike robotic sea bream. (The company now plans to move on to recreating extinct fish for display in museums.). Similarly inspired robotic pike and tuna have been built at the Massachusetts Institute of Technology.

But a robot does not have to look like an animal to borrow useful ideas from the animal kingdom. Mark Tilden and his colleagues at Los Alamos National Laboratory in New Mexico, who have been building animal-like robots for years, have now applied their knowledge to create a system that will operate in one of the environments that natural selection has not yet managed to penetrate – outer space. Their latest robot is designed to keep satellites on station.

Dr. Tilden is concerned not so much with what animals look like as with how their nervous systems work. As every schoolboy discovers, pulling some of the legs off a spider does not stop it walking. Its nervous circuitry can adjust to such injuries. That is because, unlike most modern computers (including those that control Aibo), much of that circuitry is analogue rather than digital.

LIVEWORKSHEETS

In a digital computer, information is sent around as discrete bits and bytes. If a critical bit goes missing, and the programme has not been prepared in advance for the possibility of such a loss, it breaks down. With analogue circuitry, however, there is no such thing as an independent, critical piece of data – everything is coupled together as one continuous flow of current. If some information goes missing (for example, because a schoolboy has amputated a leg), the output will change – but it could still be meaningful. Dr. Tilden's robots use cheap and basic electronic components such as transistors, resistors, capacitors, rather than fancy microelectronic silicon chips. Yet their behavior is so lifelike that they can sometimes "spook" those afraid of real spiders.

These robots, like Aibo, are toys. But a satellite-navigation system is a serious, practical application. Dr. Tilden's design for such a system is being tested in an experimental Swedish satellite called Hugin. Its task is to keep Hugin's electricity-generating solar panels pointed at the sun. It has a dozen light-sensors, each connected to a circuit whose natural oscillation is modulated by the strength of the incoming illumination. Those circuits, in turn, control the satellite's attitude jets. If the satellite moves off station, the amount of light falling on the sensors will change, and its analogue circuitry will tell the jets how much to fire to bring it round to face the correct way. It may not be as photogenic as a robot dog, but it is certainly a lot more useful.

Complete the summary below. Choose NO MORE THAN THREE WORDS from the reading passage .

The Japanese company Sony has launched its latest product, a robotic dog, on the market. The robotic dog is advertised to have (1)…….. behaviour patterns and (2)……. feelings. In fact, the robotic dog was designed under the inspiration of (3)…… rather than technology. For example, finding why fish moves so quickly with so little energy consumed will help produce (4)…… for submarines. That is why Mitsubitshi Heavy Industries has been building a robotic sea bream and MIT has already produced robotic pike. Knowledge of (5)……has also been used in creating a system operating in (6)……. In designing such a system, what scientists are most (7)……. is not what animals look like, but how (8)……. work, because if computers have analogue circuitry rather than digital one, computers will not (9)……. if a critical piece of information goes missing A satellite-navigation

LIVEWORKSHEETS

system is now (10)…….. in a Swedish satellite. It may not be as pleasant-looking but it will be more useful than a robotic dog.

Your answer

1.	2.	3.	4.	5.
6.	7.	8.	9.	10.

WRITING: 60P

I. Read the extract and use your own words to summarize it. (10p)

There are various ways of preparing for cultural shock. It is helpful to learn as much of the language as possible before going to the country, to learn about the new culture, in particular aspects such as time differences, communication, conflict resolution, climate, standard of living, transportation, ethical practices, holidays, superstitions, taboos and technology. However, something that is extremely difficult to prepare for is what is known as 'ecoshock', the result of a person's 'physiological and psychological reaction to a new, diverse, or changed ecology', a typical example of this being travel dysrhythmia, or jet lag, when people's biological clocks have problems synchronizing with the local time. Physiological adjustment to the temperature, humidity, and altitude are also features of ecoshock, though these are generally coped with in the initial stage of cultural shock rather than being prolonged difficulties in the process of adjustment to life in a new country. For those who take frequent short trips abroad, however, ecoshock may be the most difficult part of dealing with cultural shock, since they do not experience its various longer term phases.

LIVEWORKSHEETS