PASSAGE No. 1 (With solutions)

1. Read the following passage and answer the questions that follow: (8 Marks)

SPEEDING UP INDIA'S JOURNEY BY BULLET TRAINS

By: Vijay Kumar Dutt, Indian Railways

High speed in Indian Railways is at present limited to 150 KMPH. However, in many other countries the speed of Railways is of the order of 200 KM per hour (KMPH). In France, Japan, Germany, China, Spain and South Korea high speed traction above 280 KMPH has been introduced. India and Japan have signed a memorandum of understanding (MoU) on 12th December, 2015 on cooperation and assistance in the Mumbai–Ahmedabad High Speed Rail (HSR) Project referred to by many as 'Bullet Train Project'. Japan has offered an assistance of over Rs. 79,000 crore for the project. The loan is for a period of 50 years with a moratorium of 15 years, at an interest rate of 0.1 per cent.

The project is a 508-kilometre Railway line costing a total of Rs 97,636 crore, to be implemented in a period of seven years. It has been agreed that for the Mumbai – Ahemdabad HSR Project. Japan's Shinkansen Technology, known for its speeds reliability and safety, will be adopted. Transfer of technology and "Make in India" will be essential part of this assistance package. Japan will also assist India in training of personnel for HSR.' The two countries have also entered into two comprehensive technological cooperation agreements on 11th December 2015, for modernization and upgradation of Indian railways. These agreements have been signed during the official visit to India of His Excellency Mr. Shinzo Abe, the Prime Minister of Japan, during December 11-13, 2015.

On the basis of your reading of the passage, answer the questions: (1x8=8 Marks)

a) Name the countries where high speed traction above 280 KMPH has been introduced.
b) Which project is known as "Bullet Train Project"?
c) How much time and money is estimated for the Project?
d) Which technology will be adopted for the Project?
e) What agreements were signed during 11th December to 13th December 2015?
f) What is Shinkansen Technology famous for?
g) How has Japan assisted India financially for the Project?
h) Find a word from the paragraph No. 2 which means 'Necessary'.

ANSWERS:

a) High speed traction above 280 KMPH has been introduced in France, Japan, Germany, China, Spain and South Korea.
b) The MoU signed between India and Japan on cooperation and assistance in the Mumbai–Ahemdabad High Speed Rail (HSR) Project is known as "Bullet Train Project"
c) The time of seven years and an amount of about Rs 97,636 crore is estimated for the project.
d) Shinkansen Technology will be adopted for the Project.
e) The agreements signed during 11th December to 13th December 2015 were modernization and upgradation of Indian railways.

f) Shinkansen Technology is famous for its speeds reliability and safety.
g) Japan has offered an assistance of over Rs. 79,000 crore for the project. The loan is for a period of 50 years with a moratorium of 15 years, at an interest rate of 0.1 per cent.
h) The word is 'essential'.

PASSAGE NO 2

2. Read the following passage carefully: (8 Marks)

Heartbeats get abnormal after exercising, running, or after doing some strenuous work. There is nothing to worry about. But if your heart beats at irregular pace often, it is important to take note of it rather than ignore it as it can be a warning sign for a heart ailment called arrhythmia.

A normal heartbeats 60-100 times per minute while resting, but if it starts beating too slowly or too fast or if the heartbeat is irregular of premature, then that condition is known as arrhythmia. People tend to avoid it as a minor issue little knowing that it can lead to a stroke, fall due to drop of BP, loss of consciousness or even result in heart failure.

In a country where people take time to press the panic button when it comes to illnesses and medical problems, it is no surprise that a number of cases of irregular heartbeats go unnoticed for a long time. Some dismiss it as just a recurring symptom of body weakness; others may ignore it as a side-effect of blood pressure issues. The lack of awareness about arrhythmia means that not many people even take note of the symptoms.

When heartbeat is not too fast, it is called tachycardia. When the beats are slow, it is known as bradycardia. An irregular heartbeat may be due to artrial fibrillation.
The problem is that the symptoms are quite vague and can be associated with other minor medical problems in India, not many people are aware that there is a heart's electricity related disorder called arrhythmia. Often it is diagnosed when doctors are checking a patient for something else. More often, by the time it is diagnosed, major damage has already been caused.

It is important to take seriously any abnormality in the rhythm of our heart. There are many symptoms that can help predict arrhythmia like shortness of breath, weakness, early fatigue, palpitations, thumping in the chest, dizziness, chest pain, fainting and, of course, too fast or slow heartbeats. Ignoring these symptoms is inviting a major health trouble.

While some type of arrhythmias can be harmless, other can be life threatening as it may disrupt the normal functioning of the heart. In some cases, it can lead to heart failure too. The condition is treatable with the help of implantation of a pacemaker, devices or through burning the points from where irregular beats originate through radio-frequency heat waves. There are a few things in medicine where a permanent cure is possible. For certain arrhythmia this stands true with radio frequency ablation.

On the basis of your reading of the passage, answer the following questions:

a) What is normal heartbeat?
b) What do you call the situation when the heartbeat is too slow or fast?

c) What happens when there is drop in BP?
d) What results due to artiral fibrillation?
e) When is arrhythmia detected?
f) What danger is there when dizziness or chest pain is ignored?
g) When does heartbeat abnormally?
h) What is bradycardia?

PASSAGE No. 3

3. Read the following passage carefully: (8 Marks)

Effective speaking depends on effective listening. It takes energy to concentrate on hearing and understanding what has been heard.Incompetent listeners fail in a number of ways. First, they drift off and finally they react. They let their personal feelings about the speaker of the subject, override the significance of the message which is being sent. What can a listener do to be more effective? The first key to effective listening is the art of concentration. If a listener positively wishes to concentrate on receiving a message, his chances of success are high. It may need determination. Some speakers are difficult to follow, either because of voice problems, or because of the form in which they send a message. There is then a particular need for the determination of a listener to concentrate on what is being said.

Concentration is helped by alertness. Mental alertness is helped by physical alertness. It is not simply physical fitness, but also positioning of the body, the limbs and the head. Some people also find it helpful to their concentration if they hold the head slightly to one side. One useful way for achieving this is intensive note-taking, by trying to capture the critical headings and sub-headings the speaker is referring to.

Note-taking has been recommended as an aid to the listener. It also helps the speaker. It gives him confidence when he sees that listeners are sufficiently interested to take notes; the patterns of eye-contact when the note-taker looks up can be very positive; and the speaker's timing is aided – he can see when a note-taker is writing hard and can then make effective use of pauses.

On the basis of your reading of the above passage, answer the following questions:

a) What does effective listening lead to?
b) What is one of the hurdles that come in the way of effective listening?
c) Why is it difficult to understand what some speakers say?
d) How is note making useful for the speakers?
e) What should we do in order to concentrate?
f) What can enhance our concentration?
g) Find a word from paragraph No. 1 which means 'useless/unskilled'.

PASSAGE No. 4

4. Read the following passage carefully. (8 Marks)

Legends will tell you that flamingos are no ordinary visitors to Kutch. They were the honoured guests of king Lakho and he had forbidden the hunting of flamingos, which

came to Kutch from various parts of the world every year to breed. For centuries the region has been a heaven for the migratory birds. Today, Flamingos city, is an island in the middle of Kutch, knownto the world over as one of the biggest breeding grounds of the greater flamingos, is strewn with bodies of hundreds of flamingo chicks.
The parents of these chicks have fled from the island due to lack of food. Zooplanktons, algae and small fish that these birds survive on, are dying due to sudden increase in the salinity of the Rann water. One can ever see dead fish floating.

Flamingos need salt-encrusted, damp mud to build nests. The place where they build their nests has to be inaccessible to predatory cats and birds. It should also have sufficient food. The right mix of sweet brackish water in the Rann is crucial for the proliferation of planktons and algae that the flamingos feed on. Faced with starvation flamingos have fled from the island leaving their chicks to feed for themselves. Till date around a thousand flamingos have died.

On the basis of your reading of the passage answer the following questions in short: (1x8=8 Marks)

a. How did King Lakho look at the flamingos?
b. Where is Flamingo city situated?
c. How has Flamingo city become a mortuary today?
d. Why is Flamingo food not available in flamingo city?
e. What conditions are required to build the nests of flamingos?
f. Why did the parents of the chicks flee from the island?
g. Write the name of the fishes from the passage?
h. Find word from the Para No. 3 which means the same as "severe suffering due to hunger".

PASSAGE No. 5

5. Read the following passage carefully: **(8 Marks)**

CHESS

Chess is a two-player strategy board game played on a chessboard, a checkeredgameboard with 64 squares arranged in an eight-by-eight grid. Chess is played by millions of people worldwide, both amateurs and professionals.

Each player begins the game with 16 pieces: one king, one queen, two rooks, two knights, two bishops, and eight pawns. Each of the six piece-types moves differently. The most powerful piece is the queen and the least powerful piece is the pawn. The objective is to 'checkmate' the opponent's king by placing it under an inescapable threat of capture. To this end, a player's pieces are used to attack and capture the opponent's pieces, while supporting their own. In addition to checkmate, the game can be won by voluntary resignation by the opponent, which typically occurs when too much material is lost, or if checkmate appears unavoidable. A game may also result in a draw in several ways.

Chess is believed to have originated in India, some time before the 7th century, being derived from the Indian game of Chaturanga. Chaturanga is also the likely ancestor of the Eastern strategy games Xiangqi, Janggi and Shogi. The pieces took on their current

powers in Spain in the late 15th century; the rules were finally standardized in the 19th century. The first generally recognized World Chess Champion, Wilhelm Steinitz, claimed his title in 1886. Since 1948, the World Championship has been controlled by FIDE, the game's international governing body; the current World Champion is the Norwegian Magnus Carlsen. FIDE also organizes the Women's World Championship, the World Junior Championship, the World Senior Championship, the Blitz and Rapid World Championships and the Chess Olympiad, a popular competition among teams from different nations. There is also a Correspondence Chess World Championship and a World Computer Chess Championship. Online chess has opened amateur and professional competition to a wide and varied group of players. There are also many chess variants, with different rules, different pieces, and different boards.

On the basis of your reading of the passage, answer the following questions:

a) What things are required to play chess?
b) Name the six pieces which move differently?
c) What kind of power do the queen and the pawn have?
d) How can king be put into checkmate?
e) What are the other ways of winning a chess game?
f) When did obtaining power to pieces and standardizing rules in chess take place?
g) What is the role of FIDE?
h) Find a word from paragraph No. 2 that is opposite to the word 'successor'.

PASSAGE No. 6

6. Read the following passage carefully: (8 Marks)

THE YOGIC WAY OF LIFE

We give undue importance to our health and the treatment of diseases. A large number of medicines treat only the symptoms of the disease, and not the root cause. In fact, the cause of many chronic ailments is still being researched. It is here that Yoga therapy comes to our assistance. Yoga emphasizes treatment of the root cause of an ailment. It works in a slow, subtle and miraculous manner. Modern medicine can claim to save a life at a critical stage, but, for complete recovery and regaining of normal health, one must believe in the efficiency of Yoga therapy.

The yogic way of life includes a code of ethics, regulations, discipline and more, combined with prayer and meditation. Even a discussion on these subjects helps one relieve mental tensions and change attitudes. Simple *Asanas* help to stretch and relax the whole body and neutralize tensions. The sincere practice of Yoga postures benefits all levels of experience. Through continuous practice, Yoga postures can have a profound effect on the inner dimensions of life, establishing deep calm, concentration, emotional stability and confidence. Man is a physical, mental, and spiritual being, all the three. Other forms of physical exercises, like aerobics, assure only physical well-being. They have little to do with the development of the spiritual or astral body.

On the basis of the reading of the passage given above answer the following questions:

a) What do most of the medicines treat?
b) How is yoga different from the other treatments?
c) What does the yogic way of life include?

d) What do 'Simple Asanas' help to do?
e) How does sincere practice of yoga postures benefit us?
f) How does yoga therapy work?
g) Is yoga better than physical exercise? How?
h) What does the phrase 'Chronic ailments' in paragraph No. 1 mean?

PASSAGE No. 7(12 Marks)

7. Read the following passage carefully:

BE THE CHANGE YOU WANT TO SEE IN OTHERS

We have learnt from modern psychology that nobody wants to be told what to do by someone else. We resist when someone tries to make us do something in a new way. Yet, we persist in trying to change others.If we want others to change their ways, telling them to do so will have little effect unless we are living examples of that behaviour.

A team of researchers went to Africa to study the behaviour of elephants. They came across a herd of elephants running wild, and destroying their environment.

They discovered that these were all teenage male elephants. They had no adult role models to learn from. The researchers arranged to have some adult elephants brought in. In the beginning, there was no change and the teen elephants continued to run wild and fight with each other. However, after a few days the teen elephants began to settle down. Over time, they became well behaved and their wild actions subsided.

On their own, the teen elephants had no role models and did not know how to behave. Once adults were introduced into their group, the teens had role models and began to be disciplined. In the same way, as parents, we teach our children through loving discipline and by setting an example. Our children do not believe in our words alone but in what they see us do. They copy our own good and bad habits because that is the example we set. Similarly, when we are in a position to train or teach others whether we are teachers, parents, employers, or citizens imploring others to be conscientious we must first set an example ourselves. That is the only way to bring about change. If we want to see positive change in others and in our family, neighbourhood, community, society, or country, then we need to set a good example.

Source: Speaking Tree

On the basis of your reading of the passage, answer the following questions: (2x4=8 Marks)

a) How can you say that people dislike to be told what to do by someone else?
b) Why did the researchers arrange some adult elephants?
c) How did the introduction of adult elephants change the behaviour of teenage male elephants?
d) What is the only way to bring about change?

Choose the correct option out of the choices to give the meaning of the words and phrase given below: (1x4 = 4 Marks)

i) Persist (Para-1)
   a) to continue or exist b) to shiver
   c) to remain absent c) to order
j) Settle down (Para-3)
   a) settlement of accounts b) calm down

c) Upside down d) downstairs

k) Subsided (Para-3)

a) settled down b) excited
c) express anger d) guided

l) Imploring (Para-4)

a) instructing b) encouraging
c) speaking loudly d) begging

PASSAGE No. 8(12 Marks)

8. Read the following passage carefully:

REMEMBERING THE FATHER OF INDIAN CONSTITUTION – Dr. B.R. AMBEDKAR

Dr. Bhimrao Ramji Ambedkar, popularly known as BabasahebAmbedkar, is referred to as the architect of the Indian Constitution. Dr. Ambedkar was born in a community which had suffered oppression for many centuries and were treated as 'untouchables'. However, this did not prevent him from realising his dreams. The struggle he had faced in his life had only strengthened him.

At a time when untouchability was the norm, it was because of the foresight of Maharaja Sayaji Rao of Baroda that Dr. Ambedkar was able to enter Elphinstone College in Bombay and after graduation join the Baroda State Service. Later, the Maharaja, who was sending some students to the USA for higher studies at the Columbia University, included Dr. Ambedkar among them. Subsequently, Dr. Ambedkar moved to the United Kingdom and studied at the London School of Economics and was subsequently awarded the degree of Barrister-at-Law by Gray's Inn.

Though Dr. Ambedkar has contributed in many walks of life as a scholar, journalist, economist, activist, legal luminary, social reformer and political leader; his biggest and most important contribution was in his role as the Chairman of the Drafting Committee of the Constitution of India.

After India's Independence on August 15, 1947, Jawaharlal Nehru, the then Prime Minister of India, invited Dr. Ambedkar to be a part of his Cabinet as the nation's first Law Minister. He accepted the same and on August 29, 1947 Dr. Ambedkar was appointed as the Chairman of the Drafting Committee.

(Source: Employment News)

On the basis of your reading of the passage, answer the following questions:
(2x4=8 Marks)

a) How did Dr. Ambedkar's early life struggle help him later on?
b) Why is Dr. Ambedkar called the architect of Indian Constitution?
c) Which social stigma did he face during his childhood?
d) Dr. Ambedkar was a multi-dimensional personality. Justify the statement.

Choose the correct option out of the choices given that means: (1x4 = 4 Marks)

a) One who designs something.
i) scholar ii) journalist iii) architect iv) reformer

b) Cruel or unfair treatment.
   i) untouchability ii) oppression iii) stubborn iv) norm
c) An expert of something.
   i) activist ii) Chairman iii) reformer iv) luminary
d) One who knows a lot about a subject.
   i)scholar ii) referred iii) leader iv) suffered

PASSAGE No. 9(12 Marks)

9. Read the following passage carefully:

EXCERPT FROM "WINGS OF FIRE"

A large variety of materials go into the making of a launch vehicle— both metallic and non-metallic, which include composites and ceramics. In metals, different types of stainless steel, alloys of aluminium, magnesium, titanium, copper, beryllium, tungsten and molybdenum are used.

Composite materials are composed of a mixture or combination of two or more constituents which differ in form and material composition and which are essentially insoluble in one another. The materials which combine may be metallic, organic or inorganic. While other material combinations possible are virtually unlimited, the most typical composites in launch vehicles are made of structural constituents, embedded in a matrix. We used a large variety of glass fibre reinforced plastic composites and opened avenues for the entry of Kevlar, polyamides and carbon-carbon composites. Ceramics are special types of baked clay used for microwave transparent enclosures. We considered using ceramics, but had to reject the idea then due to technological limitations.

Through mechanical engineering, these materials are transformed into hardware. In fact, of all the engineering disciplines which feed directly into the development of rocketry, mechanical engineering is perhaps the most intrinsic one. Be it a sophisticated system like a liquid engine or a piece of hardware as simple as a fastener, its ultimate fabrication calls for expert mechanical engineers and precision machine tools. We decided to develop important technologies like welding techniques for low-alloy stainless steel, electroforming techniques, and ultra-precision process tooling. We also decided to make some important machines in-house, like the 254-litre vertical mixer and the groove machining facility for our third and fourth stages. Many of our subsystems were so massive and complex that they implied sizeable financial outlays.

Without any hesitation, we approached industries in the private sector and developed contract management plans which later became blueprints for many government-run science and technology business organizations.

- Dr. A. P. J. Abdul Kalam

On the basis of your reading of the passage, answer the following questions:

(2x4=8 Marks)

a) What are the two basic characteristics of composite materials?
b) Why didn't the narrator use ceramics into the making of a launch vehicle?

c) Why does the narrator term mechanical engineering as the most interesting and valuable engineering discipline?
d) How did the private industries contribute in making of the launch vehicle?

Choose the correct options out of the choices given as per the direction given:

(1x4 = 4 Marks)

a) The meaning of the word 'insoluble' in the given context is: (Para-2)
   i) a problem which is impossible to solve
   ii) a substance which does not dissolve in a liquid
   iii) a person who is not liked by anyone
   iv) a great occasion or event
b) The meaning of the word 'embedded' used in Para-2 is:
   i) to rotate something
   ii) to push something
   iii) to pluck out something
   iv) to fix something firmly
c) The word which means as – 'very interesting or valuable' in Para-3 is:
   i) Mechanicalii) sophisticated iii) intrinsic iv) vertical
d) The word which is opposite of – 'horizontal': (from Para – 3)
   i) material ii) expert iii) welding iv) vertical