I-B.TECH-I-Semester End Examinations

Regular - July - 2021

ENGLISH [code: EN105HS]

~~*~~ Answer key ~~*~~

1. a) Fill in the blanks with articles

i. The
ii. The
iii No article
iv a
v. a

b) Correct the Sentences using appropriate prepositions

i. The protesters were prevented from entering the building.

2. I prefer Spending time with my family than watching a film (No Error)

3. The little boy is sleeping beside his mother

4. They Sat under the shade of a tree (No Error)
[in/underneath/beneath]

5. We are planning to spend the Summer in kashmir

(R) Chandra Sekhar Venkata Raman was born in Tiruchirapalli on 7th November 1888. His father was lecturer in physics so that from the first he was immersed in an academic atmosphere. When he was only 19, he became a member of the Indian Association for the Cultivation of Sciences.

Hard work was second nature to him and academic brilliance was part of him. He worked for long hours, practically living in the laboratory when he was working on some experiment. He was mainly interested in acoustics, the Science of Sound. He studied how stringed instruments like the tabla and the mridangam, violin and the sitar could produce harmonious music. He was elected to the Raman Society of London in 1924 and the British government made him a knight of the British Empire in 1929. It was a high honor for any great Scientist.

C.V. Raman participated as a delegate at the Universities' Congress in 1921. During this sea voyage to London that he was struck by the 'blue' colour of the Mediterranean Sea. Many people noticed this earlier but they all thought it was the reflection of sky. But C.V. Raman was, somehow not impressed with this belief. He conducted experiments in this direction.

He Speculated that the blue colour of the Sea could be caused by the Scattering of Sunlight by the water molecules. He proved beyond doubt that water molecules indeed scatter light.

on his return to India, he initiated research in three areas: the Scattering of light by liquids, the Scattering of X-rays by liquids and the viscosity of liquids. of these three, it was the work in the first area that fetched him the "Nobel prize" in 1930. over the next Seven years, he along with his distinguished associates such as K.R. Ramnathan and K.S. Krishnan, Conducted and Supervised many experiments along these lines. The discovery was announced through the Associated press on 29th February and 8 March. Raman Sent a detailed note along with an explanation to Nature.

Raman announced his discovery of 'new radiation' describing the behavior of a beam of light passing through a liquid chemical to the world. Raman had achieved what he had claimed in 1924. for Scientific research, it was red letter day this discovery - 'Raman Effect" Caught the attention of the world.

(3)

(a) Significant advancements in the field of architecture during the reign of the Mauryan dynasty:

Indian architecture's important phase began with the "Mauryan Period". Megasthenes, the Greek ambassador of Seleucus Nicator who visited the Mauryan Court, described Chandragupta Maurya's palace as an excellent architectural achievement.

There were Significant advancements in the field of architecture during Ashoka's reign. Mauryan art and architecture imbibed the influence of the Persians and the Greeks. During the reign of Ashoka, many monolithic stone pillars were erected, on which teachings of 'Dharma' were inscribed. The highly-polished pillars with animal figures adorning the top (Capitals) are unique and remarkable. The lion Capital of the Sarnath Pillar has been accepted as the emblem of the Indian Republic. The stupas of Sanchi and Sarnath are symbols of the achievement of Mauryan architechture. The gateways of Sanchi stupa with beautiful sculptures depicting scens from the Jataka Stories bear testimony to the skill and aesthetic sense of the artisans.

3 (b) The architecture of India is rooted in its history, culture, and religion. Among a number of architectural styles and traditions contrasting Hindu temples architecture and Indo-Islamic architecture are the best known historical styles. There are three broad styles of Indian temple architecture. Nagara (Northern style), Vesara (mixed style) and Dravida (Southern style). Each of these styles has its own distinct cultural influences.

It is necessary to protect our ancient Indian architecture because protection of our art and architecture is the protection of our culture, tradition, belief, religion and ultimately our identity. We should protect our historical buildings. It can make economic sense to retain historic buildings and improve them to meet modern codes and requirements.

Innovation in architectures is with no doubt extremely important because these ancient architectures are the reflection of our history, they help us to understand and respect people who lived in different eras with different habits and traditions. Hence we have to protect our ancient Indian architecture.

(4) (4) ~~Resume~~

(4) Draft a job application consisting of resume and a cover letter.

* Resume *

⇒ Personal details — 2m

⇒ Academic Qualifications — 2m

⇒ Training projects undertaken/ Experience — 2m

⇒ Other details like Achievements/ Computer proficiency — 1m

* Cover letter *

⇒ Heading: Station, Date, from & To address — 1m

⇒ Proper salutation { Dear sir/madam, } — 1m

⇒ The Subject line — 1m

{ Sub: Applying for the post of a Trainee Engineer in BHEL - }

⇒ Body of the letter — 3m

⇒ Signing off — 1M

(5) (a) Evolution of the blue Jeans

Blue jeans as we see them have a long and strange history. Denim cloth has an unusual history. The name comes from Serge de Nimes, a city in Southern France. Jeans underwent many changes both in use and form in the long history. Denim cloth is originally made from wool. But by 1700's it was made from wool and cotton. only later it made solely from cotton.

Blue jeans in the form that we know them today did not come about until the middle of the 19th century. first, the strong fabric was used as sail for boats. Levi strauss, an enterprising immigrant who happend to have a few bolts of blue denim cloth on hand, recognised a need for strong work pants in the mining communities. He first designed and marketed Levi's in 1850. The orginal Levi's did not contain rivets. A tailor - Jacob Davis invented riveted pants. A few other changes were made over the next century. Zippers replaced buttons in 1920. In 1937, the rivets on the back pockets were moved inside. In 1960s they were removed entirely from the back pockets.

5. (b) * Discuss the terms *

(i) Carding: Carding is a process, where the cotton is put through machines that contain brushes with bent wire teeth. These brushes - called cards - clean, disentangle, straighten and gather together the cotton fibers. Hence the process is known as Carding.

(ii) Sanforising: Most denim cloth is pre-shrunk. This process of shrinking before stitching is called Sanforising. It ensures that stitched jeans do not shrink beyond tolerable levels.

(iii) Washing: Some jeans are pre-washed and/or stonewashed to alter the appearance or texture of the finished jeans. pre-washing involves washing the jeans in industrial detergent to soften the denim while stone washing - pumice is added to the load, resulting in faded appearance.

(6) Compare and Contrast Skimming & Scanning

Skimming and Scanning are strategies for effective reading. Skimming is reading rapidly in order to get a general idea/overview of the material. It is used to quickly identify the main ideas. we often skim when we have a large amount of text to read it a limited time

Ex:- Read the table of Contents / chapter overview
- Reading the heading in newspaper
- Glance main headings in each chapter

The main purpose of reading - Skimming is to understand the gist / overview.

Scanning is a useful reading strategy. when we have a definite purpose in our mind for reading something, we run our eyes quickly over the text to locate specific words or phrases that are of interest to us. for instance, in a job advertisement, we look for specific details such as the position, salary, requisite qualifications and experience and location of the job, among other things.

(7) Balanced diet is the key to your good health

The weight loss industry is a very large profitable and growing industry. Modern life styles often cause weight gain and obesity leading to an influx of weight loss plans and products into the market. It is widely accepted that weight gain or loss depends on food intake and exercise.

" A healthy eating pyramid " helps to demonstrate how a balanced diet can be achieved I have learnt the following form the bricks of a healthy food pyramid!

Whole grains :- Healthy carbohydrates take longer for the body to digest. This helps to prevent any sudden rise and fall of blood sugar levels and insulin in the body. Healthy carbohydrates help prevent Type 2 diabetes and heart diseases. Some sources of healthy carbohydrates are oatmeal, brown rice and whole-wheat bread.

Healthy fats & oils :- It is a myth that all fats should be avoided. Some fats are healthy and required for a balanced diet. They help control cholesterol and prevent heart diseases.

Healthy fats can be found in olives, nuts, seeds, Sunflower, Peanuts and fatty fish such as Salmon.

fruits and vegetables: The next group of food items to appear on the ~~food~~ pyramid are fruits and vegetables. A diet rich in fruits and vegetable has innumerable benefits. It can decrease the chances of having a heart attack, possibly protect against some types of cancers, lower blood pressure.

fish, poultry and eggs:- fish is an important source of protein and is rich in omega-3 fatty acids, which are known to prevent heart disease. Chicken and turnkey are low in saturated fats when compared to red meat. Eggs too, provide protein and are a good suplement to breakfasts.

Dairy: for generations, we have believed that dairy products are good for growing bones as the contain calcium and vitamin D.

Red meats, procesed meats and butter:
These foods should be consumed very sparingly. Red meats and procesed meats like bacon and sausages contain high levels of sodium. They increase the risk of dizbetes, heart diseases and colon cancer.

Refined grains, Sugary drinks, Sweets and Salt:

Refined grains include white bread, rice and pasta. Potatoes too fall into this category of foods that should be eaten very sparingly. These items are high in Sodium and increase the risk of heart diseases and result in weight gain.

Foods that are rich in salt like potato chips, cheese and sauces contain high Sodium levels that may lead to heart attack & stroke. When buying food, check the labels and choose the ones with the lowest Sodium Content.

I have noticed that Healthy Eating Pyramid does not give specific advice about the number of cups or ounces of specific food items that one should have on a daily basis. The amounts can vary depending on body size and physical activity.

8 a) Mokshagundam Vishvesvaraya's engineering excellence

Mokshagundam Visvesvaraya was a man who excelled at many different fields was born on 15th September 1861. Right from his childhood days, Visvesvaraya learnt from his parents deep respect for the culture and the traditions of the land. He had been a Combination of endeavor, adventure, Courage, intellect, Capacity and strength. He led the Country to the path of progress and his each and every creation was considered mighty and magnificient. Discipline was his watchword. Here giving two instances of Sir M.V's engineering excellence.

"Block System": When he was 32 years old, a very difficult task was assigned to him where he was asked to find a way of supplying water from the river Sindh to a town called Sukkur. He prepared an ingenious plan, which amazed the other famous engineers. He developed a new system called the "Block System" where he devised steel doors, these could stop the wasteful flow of water in dams. Even British officers of those times

were astonished by the dexterity and they were full of praise for the invention.

* "Krishnaraja Sagar Dam": *

Krishnaraja Sagar Dam, in the vicinity of the renowned Brindavan Gardens, is reminiscent of Visvesvaraya's ingenuity. The dam was conceived not only for the purpose of irrigation, but also providing electricity to the Kolar goldfields. As the work of construction was proceeding the river Cauvery rose in spate. Visvesvaraya directed ~~the~~ work to be carried out with greater enthusiasm. By facing all problems and difficulties with courage, he got the work completed by carrying the work non stop day and night and finished well in time.

Other instances are:

→ "Construction of dam across Musi" - to provide twin cities water problem

→ "Economic Conference" - to find ways of removing ignorance, poverty and sickness

(8)

(b) Report on "The Advantages and Limitations of on-line Learning during the Pandemic."

* Report should cover the following points:

- Introduction & Purpose of online learning during Pandemic — 2 M
- Advantages of on line learning — 2 M
- Limitations of on line learning — 2 M
- Conclusion — 1 M.

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