

**(A)- Choose the correct answer for each sentence of the following.**

- 1- What you see here is obviously an occupying space. Therefore, it is some form of.....  
(material-matter-object).
- 2- It is neither animal nor vegetable. Therefore, it must be (organic- Unorganic- inorganic).
- 3- To cause it to move, some.....(force- pressure-energy) must be placed upon it.
- 4- If it changes shape as a result of this action, we will know that it is .....(formable-  
deformable- rigid).
- 5- It has no ability to perform work. It has no .....(energy- capacity-force).
- 6- To study the effects of this action, we will employ the branch of Physics and Engineering  
known as.....(Mechanics- Mathematics- Arithmetics).
- 7- A quantity which may have numerous different values is known as.....(variable-vector-  
infinite series).
- 8- Dynamics is a branch of .....(Mathematics- Physics- Mechanics).
- 9- Both gases and liquids are classified as.....(solid bodies- Fluids- deformable bodies).
- 10- Nuclear .....(reactor- mine- factory) is a device in which nuclear power is produced.
- 11- Surveying is a branch of.....(Civil Engineering- Mechanical Engineering- Electrical  
Engineering).
- 12- Thermodynamics is science that studies the relationship between heat and .....(mechanical  
work - electrical power- chemical energy).
- 13- Our .....(turnover- operations- workers) this year will be about 500 dollars.
- 14- She works .....(fixed time- flexi time- leisure time) so she can start work by any time  
between 8 a.m. and 9a.m.
- 15- My son is an .....(apprentice- engineer- accountant) at a local engineering firm. His  
training there lasts for two months.
- 16- Our .....(workforce- shift- overtime) has been cut because we do not have enough orders.
- 17- Our maintenance .....(workers- employees- people) do all our repairs.
- 18- Please, do not take anything from the stores room today. I am trying to do a stock  
.....(facility- check- inventory).

19- We are thinking of changing our raw material (suppliers- operators- craftsmen).

20- I have just heard that our main supplier has gone .....(bust-mad-wealthy). He has lost all his money.

### **(B)- Reading Comprehension:**

**Read the following passage then answer the questions below.**

#### **What is Engineering?**

Engineering is an incredibly diverse and exciting field. But it can also be confusing because there are so many types of engineering. Examples of Engineering fields include: Civil, Chemical, Electrical, Environmental, Computer, Mechanical, Industrial, Aerospace, Biomedical, Construction, and Agricultural. Underlying all the engineering fields is a common way of thinking, analyzing and solving problems. At the heart of engineering is problem solving, so they all like to solve problems and accomplish things in life, and engineers are really goal oriented, they like to have objectives, have dreams, have goals and accomplish them. So, if you've got some interest in Mathematics, and some interest in Physics and applying those to everyday challenges and solving them, and seeing the fruit of your labor come to increase the quality of people's lives then engineering is a great field for you. The way in which engineers think and work has been defined as the "Engineering Method" comparable to the scientific method which you may already be familiar with. Many people think that engineering is just about liking Math and Science, that is a component of it, but an engineer doesn't sit in a cubical doing calculations all day, engineers work as usually in big multidisciplinary teams, they need very good communication skills, interpersonal skills, problem solving skills. If you think of the communication skills you are not just dealing with other engineers, you may be dealing with public officials, the general public at large, your client, so you really have to be able to explain your project to them, and your solution to it. The world today is facing enormous challenges. Challenges such as Global Warming, Purging Population Growth, continually Increasing Energy Demands, Natural Resource Depletion, and the challenge of Sustainable Growth. In fact, engineers will be able to solve these problems, but this country and this world needs more young men and women to enter engineering. Also, engineering is a very good field for women. There are no barriers either in practice or in academics, it's a very exciting field, it's a very flexible field where there are lots of different job opportunities, you can decide you want to work close to home, you can decide you want to travel. There are lots of opportunities and you can really pick the type of life style that suits you.



- 1- What are the different fields of Engineering according to this passage.
- 2- What is the common characteristic feature between the different fields of Engineering?
- 3- What is the "Engineering Method?"
- 4- What other skills besides Math and Science any engineer should have?
- 5- What are the different challenges that face the world nowadays?
- 6- Is Engineering good for women? Why? Why not?

C)- Mark true or false for each sentence of the following.

- 1- Biomedical engineers have NOTHING to do with designing systems and products, such as artificial internal organs, artificial devices that replace body parts, and machines for diagnosing medical problems. ☒
- 2- Students that use social media regularly will NOT lose their ability to engage in face to face communication. ☒
- 3- The Pros of Technology include improving the efficiency for business and creating more job opportunities. ☒
- 4- Engineering is just about Math and Science. It does not include any other communication skills. ☒
- 5- Engineering is a flexible field where there are lots of different job opportunities. ☒
- 6- Staying in contact is easier now than it has ever been. ☒
- 7- The Cons of Technology include a social divide and the creation of a generation of laziness. ☒
- 8- Facebook is ruining careers, is banned in certain countries, and is accused of invading the privacy of its users. It is also one of the most popular sites on the internet. ☒
- 9- Social media can enable students to easily contact each other with regards to school projects and assignments. ☒
- 10- Biomedical engineers work in hospitals where therapy occurs and others work in laboratories doing research. ☒

**D)- Write a paragraph on ONLY ONE topic of the following.**

1- Social media has become one of the best mediums for transfer of information and knowledge in the world. Like any other technological innovation social media has its own share of advantages and disadvantages. **Write a short paragraph on the advantages and disadvantages of social media networks for school students.**

2- "People wanna share and stay connected with their friends and people around them. When people have control over what they share, they are comfortable sharing more. When people share more, the world becomes more open and connected." Mark Zuckerberg. Facebook is not just a company or one of the most popular social media networks all over the globe, but there is a big history beyond it. **Write a short paragraph on the history of facebook and the story of its founder Mark Zuckerberg.**

3- Biomedical engineers analyze and design solutions to problems in biology and medicine, with the goal of improving the quality and effectiveness of patient care. **Write a short paragraph on the education, job duties, and work environment of biomedical engineers.**

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A) choose the correct answer for each sentence of the following:

1 - matter

2 - inorganic

3 - pressure

4 - formable

5 - energy

6 - Mechanics

7 - variable

8 - Mechanics

9 - fluids

10 - reactor

11 - civil engineering

12 - mechanical work.

13 - turnover

14 - flexi time

15 - apprentice

16 - workforce

17 - people.

18 - check

19 - suppliers

20 - bust



## B) Reading Comprehension

1. The different fields of engineering are:

Civil, Chemical, Electrical, Environmental, Computer Mechanical, industrial, Aerospace, Biomedical Construction and Agricultural.

2 - all the engineering fields is a common way of Thinking, analyzing and solving problems.

3 - The way in which engineers think and work has been defined as the "Engineering Method", comparable to the scientific Method.

4 - engineers work as usually in big multidisciplinary teams so they need very good communication skills. interpersonal skills, problem solving skills.

They need communication skills to explain their projects and solutions.

5 - The world today is facing enormous challenges such as: global warming, surging population growth, continually increasing energy demands, natural resource depletion, and the challenge of sustainable growth.

6 - Yes, Engineering is good for woman because: There are no barriers either in practice or in academics, it's a very exciting field, it's very flexible field where there are lots of different job opportunities, you can decide you want to work close to home or want to travel. There are lots of opportunities and you can pick the type of life style that suits you.



C - Mark True or False:-

1 - False

2 - False

3 - True

4 - False

5 - True

6 - True

7 - True

8 - True

9 - True

10 - True

D) write a paragraph

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Social Media has its own share of advantages and disadvantages. The advantages of social media for school students are: They can contact each other and their teacher. Social media can enable students to easily contact each other with regards to school projects and assignments. Students and parents can be on the same page and teachers can contact parents to tell them about their children. Students who use it can take part in learning process. When they are doing homework they send message to get the answer of any question or put a question and other students benefit from feedback of the teachers. They work as a team from home. Social media build self-confidence of students. The disadvantages of social media are: it may distract students. Some students are distracted by social media and teachers have no option to know which students give attention so it makes distraction. Some students will use it not for education, will use it for personal communication. They can write hurtful posts and this will scare other students. Those who use social media regularly will lose their ability to communicate in face to face communication. It is impossible to know which students use it for education. This was the pros and cons of social networks for school students.