No. of printed pages: 6



 Std: XII
 Marks: 100

 Date: 16-09-2014
 Time: 3 hrs

**General Instructions:** 

- This paper consists of three sections: Section A, B and C. All the sections are compulsory.
- Separate instructions are given with each section and question, wherever necessary. Read these instructions carefully and follow them faithfully.
- Do not exceed the prescribed word limit while answering the questions.

## **SECTION A - (30 Marks)**

#### **READING:**

# 1. Read the following passage carefully and answer the questions that follow: (10)

We can distinguish three different realms of matter, three levels on the quantum ladder. The first is the atomic realm, which includes the world of atoms, their interactions, and the structures that are formed by them, such as molecules, liquids and solids, and gases and plasmas. This realm includes all the phenomena of atomic physics, chemistry, and, in a certain sense, biology. The energy exchanges taking place in this realm are of a relatively low order. If these exchanges are below one electron volt, such as in the collisions between molecules of the air in a room, then atoms and molecules can be regarded as elementary particles. That is, they have "conditional elementarity" because they keep their identity and do not change in any collisions or in other processes at these low energy exchanges. If one goes to higher energy exchanges, say 104 electron volts, then atoms and molecules will decompose into nuclei and electrons; at this level, the latter particles must be considered as elementary. We find examples of structures and processes of this first rung of the quantum ladder on Earth, on planets, and on the surfaces of stars.

The next rung is the nuclear realm. Here the energy exchanges are much higher, on the order of millions of electron volts. As long as we are dealing with phenomena in the atomic realm, such amounts of energy are unavailable, and most nuclei are inert: they do not change. However, if one applies energies of millions of electron volts, nuclear reactions, fission and fusion, and the processes of radioactivity occur; our elementary particles then are protons, neutrons, and electrons. In addition, nuclear processes produce neutrinos, particles that have no detectable mass or charge. In the universe, energies at this level are available in the centers of stars and in star explosions. Indeed, the energy radiated by the stars is produced by nuclear reactions. The natural radioactivity we find on Earth is the long-lived remnant of the time when now-earthly matter was expelled into space by a major stellar explosion.

The third rung of the quantum ladder is the sub-nuclear. Here we are dealing with energy exchanges of many billions of electron volts. We encounter excited nucleons, new types of particles such as mesons, heavy electrons, quarks, and gluons, and also antimatter in large quantities. The gluons are the quanta, or smallest units, of the force (the strong force) that keeps the quarks together. As long as we are dealing with the atomic or nuclear realm, these new types of particles do not occur and the nucleons remain inert. But at sub nuclear energy levels, the nucleons and mesons appear to be composed of quarks, so that the quarks and gluons figure as elementary particles.

<ul><li>1. The primary topic of the passage is which of the following?</li><li>a) Particles and processes found in the atomic, nuclear, and sul</li></ul>	bnuclear realms
b)The interaction of the realms on the quantum ladder	
© c)Atomic structures found on Earth, on other planets, and on the	he surfaces of stars
d) Levels of energy that are released in nuclear reactions on Ea 2. According to the passage, radioactivity that occurs naturally on	
a) high energy exchanges on the nuclear level that occurred in	an ancient explosion in a star
b)the production of particles that have no detectable mass or e	electric charge
c)processes that occur in the center of the Sun, which emits ra	diation to the Earth
d) phenomena in the atomic realm that cause atoms and molecular and Electrons.	cules to decompose into nuclei
3. The author organizes the passage by	
a)making distinctions between two groups of particles, those the composite	at are elementary and those that are
b)describing several levels of processes, increasing in energy, a generally decreasing in size	nd corresponding sets of particles,
c)explaining three methods of transferring energy to atoms and constitute atoms	to the smaller particles that
d) putting forth an argument concerning energy levels and then qualifications of that argument are necessary  4. According to the passage, which of the following can be found in the second content of the following can be found in the second content of the following can be found in the following can be fou	<u> </u>
a) More than one level of energy exchange	
b)Exactly one elementary particle	
c)Exactly three kinds of atomic structures	
d)Three levels on the quantum ladder 5. According to the author, gluons are not	
a) produced in nuclear reactions	
b) considered to be detectable	
c) encountered in sub-nuclear energy exchanges	
d)related to the strong force	
6. At a higher energy level than the sub nuclear level described, be expected on the basis of the information in the passage tha	
a) another set of elementary particles	
b) excited nucleons	
0	

1.1. Pick out the correct option.

(6)

- c) elementary mesons
- d) a kind of particle without detectable mass or charge

 $\cup$ 

1.2. Answer the following questions:

(2)

- a) What does the atomic realm include?
- b) What happens in the area that deals with sub-nuclear?
- 1.3 Find the words from the passage which mean the same as:

(2)

(12)

- a) provisional (para1)
- b) synthesis

(para2)

2. Read the passage given below and then answer the questions which follow: 1 To make our life a meaningful one, we need to mind our thoughts, for our thoughts are the foundation, the inspiration, and the motivating power of our deeds. We create our entire world

by the way we think. Thoughts are the causes and the conditions are the effects.

- 2 Our circumstances and conditions are not dictated by the world outside; it is the world inside us that creates the outside. Self-awareness comes from the mind, which means soul. Mind is the sum total of the states of consciousness grouped under thought, will and feeling. Besides self-consciousness we have the power to choose and think. Krishna says: "no man rest'th a moment inactive". Even when inactive on the bodily plane, we are all the time acting on the thought plane. Therefore if we observe ourselves, we can easily mould our thoughts. If our thoughts are pure and noble, naturally actions follow the same. If our thoughts are filled with jealousy, hatred and greed, our actions will be the same.
- 3 Karmic ally, however, thought or intent is more responsible and dynamic than an act. One may perform a charitable act, but if he does not think charitably and is doing the act just for the sake of gain and glory, it is his thoughts that will determine the result. Theosophy teaches us that every thought, no matter how fleeting, leaves a seed in the mind of the thinker. These small seeds together go to make up a large thought seed and determine one's general character. Our thoughts affect the whole body. Each thought once generated and sent out becomes independent of the brain and mind and will live upon its own energy depending upon its intensity.
- 4 Trying to keep a thought from our mind can produce the very state we are trying to avoid. We can alter our environment to create the mood. When, for instance, we are depressed, if we sit by ourselves trying to think cheerful thoughts, we often do not succeed. But if we mix with people who are cheerful we can bring about a change in our mood and thoughts. Every thought we think, every act we perform, creates in us an impression, like everything else, is subject to cyclic law and becomes repetitive in our mind. So, we alone have the choice to create our thoughts and develop the kind of impressions that make our action more positive.
- 5 Let us choose the thought seeds of right ideas, noble and courageous aspirations that will be received by minds of the same nature. Right introspection will be required of us to determine what we really desire to effect. Everything in the universe is inter-related and inter-dependent, that we live in one another and by accepting the grand principle of universal brotherhood we shall be in a position to appreciate what a heavy responsibility is ever ours to think right. Let us reflect and send loving and helpful thoughts and lighten the load of the world's suffering.

2.1 Answer the follows	ing questions:	
a. How can we make	our life meaningful?	1
b. Why does Krishna s	say, "No man rest'th a moment inactive?"	2
c. How do our thoughts affect the whole body?		2
d. How can we change our mood when we are depressed?		2
e. How can we bring about the desired effect?		2
2.2 Find the words from the passage which mean the same as:		3
a. full of activity	(Para 3)	
b. tedious	(Para 4)	
c. realize	(Para 5)	

3. Read the passage given below and answer the questions that follow:

(8)

The small village of Somnathpur contains an extraordinary temple, built around 1268 A.D. by the Hoyasalas of Karnataka-one of the most prolific temple- builders. Belur and Helebid are among their-better-known works. While these suffered during the invasions of the 14th century, the Somnathpur temple stands more or less intact in near-original condition.

This small temple captivates with the beauty and vitality of its detailed sculpture, covering almost every inch of the walls, pillars, and even ceilings. It has three shikharas and stands on a star-shaped, raised platform with 24 edges. The outer walls have a profusion of detailed carvings: the entire surface run over by carved plaques of stone. There were vertical panels covered by exquiste figures of gods and goddesses, with many incarnations being depicted. There were nymphs too, some carrying an ear of maize (a symbol of plenty and prosperity. The elaborate ornamentation, very characteristic of Hoyasala sculptures, was a remarkable feature. On closer look - and it is worth it - the series of friezes on the outer walls revealed intricately carved caparisoned elephants, charging horsemen, stylized flowers, warriors, musicians, crocodiles, and swans.

The temple was actually commissioned by Soma Dandanayaka or Somnath (he named the village after himself), the minister of the Hoyasala king, Narasimha the Third. The temple was built to house three versions of Krishna. The inner center of the temple was the kalyana mandapa. Leading from here were three corridors, each ending in a shrine, one for each kind of Krishna-Venugopala, Janardana and Prasanna Keshava, though only two remain in their original form. In the darkness of the sanctum sanctorum, I tried to discern the different images. The temple's sculptural perfection is amazing and it includes the doors of the temple and the three elegantly carved towers.

3.1 Make notes of the above passage using an acceptable format including abbreviations, with suitable titles. (5)

3.2 Make a summary of the above passage in not more than 80 words.

### **SECTION B - (30 Marks)**

#### **WRITING:**

**4.** Your school is organizing a cultural evening to collect funds for the slum children. The Education Minister has consented to be the Chief Guest on the occasion. Draft a notice about it to be displayed on your school notice, in not more than 50 words. You are the school Head Boy/ Head Girl. (4)

OR

(3)

Star Academy, a foreign language institute has been set up in your neighbourhood. The institute is in collaboration with Inlingua International and boasts of state of the art lab facilities and expert faculty. Draft a display advertisement mentioning details about the various courses and languages being offered. The Institute also assures placement to diploma holders.

5. You are Priya/Priyank,37,Kasturba Marg,Delhi.You have decided to shift your residence to Faridabad and hence, decided to discontinue your membership of Brain Trust Library, Karol Bagh. Write a letter in 120 to 150 words to the Librarian, requesting him to cancel your membership and refund your security deposit of five thousand rupees, explaining your inability to continue your membership. (6)

#### OR

You are Sooraj / Smita. You came across the following advertisement in a national daily. You consider yourself suitable and eligible for the post. Write an application in response to the advertisement given below:

Applications are invited for the post of a TGT in a reputed school of Delhi. The candidate must have at least 05 years experience of teaching. The applicant must have a pleasant personality. He/she should be creative, innovative and computer savvy. Attractive salary. Interested candidates should apply to The Principal, AKS International, Indirapuram, New Delhi within 10 days with a detailed resume.

**6.** You are Malik/Manju. You have interviewed many students studying in Classes VI to VIII and their parents, on academic achievement. For a large number of students and parents, going for tuition classes, for extra coaching has become a regular practice. The mushrooming coaching centers are an example for it. Write an article on the latest craze for tuition classes in 150-200 words. (10)

#### OR

There has been wide spread devastation caused by the 'Himalayan Tsunami' in the Uttarakhand state of India. Multiple reasons have been attributed to the havoc caused by heavy rains. Write an article in about 150-200, highlighting the steps taken by the administration to rescue and evacuate the people from the flood hit areas. Also express your opinion on how this kind of tragedy can be averted in future. You are Manish/ Micky

7. Computer games and video games have become popular with children today. As a result outdoor games seem to have no place in their life anymore. You are Mukesh/ Meena. You decide to write a speech in about 150-200 words, to be delivered in the school assembly on your experiences about the joys of playing outdoor games. (10)

## OR

You are Anjali/ Anshul, the Head Boy/Head Girl of ABC Public School, Patna. You have to deliver a speech in your school assembly on the 'World Peace Day' on the topic, 'Let's Practise Non-violence'. Write the speech in 150-200 words pointing out the recent acts of terrorism that claimed innocent lives, and highlighting the value of non-violence which is the need of the hour.

## **SECTION C - (40Marks)**

### **Text Books And Long Reading Text:**

## 8. Read the following extract and answer the questions that follow:

(4)

On sour cream walls, donations, Shakespear's head, Cloudless at dawn, civilized dome riding all cities. Belled, flowery, Tyrolese volley. Open-handed map Awarding the world its world.

(i) Why are the walls of the classroom described as being 'sour cream'?

1

(ii) What is the poet's opinion of the map, pictures and the portrait of Shakespeare?

1 1

(iii)Explain: 'Awarding the world its world.'

2

Those who prepare green wars,
 wars with gas, wars with fire,
victory with no survivors,
 would put on clean clothes
and walk about with their
 brothers in the shade, doing nothing.

(i) What sort of wars are mentioned in the above lines?

(ii) Explain: 'victory with no survivors'.

2
(iii) How should the lovers of war behave?

## 9. Answer any four of the following in 30-40 words each:

(4x3=12)

- a) What do you learn about Firozabad from the chapter 'Lost Spring'?
- b) How had Franz hoped to get to his desk? What had he to do and why?
- c) Where had the old man put his money? Why did he hold it up before the eyes of his guest and what did he do later on?
- d) How did Gandhi behave with the officials and the crowd? What did he want to convey to the Britishers?
- e) Why did everyone doubt Evan's sincerity towards taking the 'O' Level Exam?

# 10. Read the following and answer the question that follows:

**(6)** 

"Teachers are more than just individuals who instruct others about a particular subject; they are people who change lives and inspire us to do great things."

M. Hamel becomes an honest role model for the students on the day of the last lesson.

How does a teacher play a constructive role in the life of the students in the present times?

### 11. Answer any one of the following in 100 words.

**(6)** 

What efforts does Mr. Lamb make to strike up a friendship with Derry, the small boy, who enters his garden? Why?

#### OR

The story 'Should Wizard Hit Mommy' highlights the conflict between the views of a child and an adult. Elaborate.

# 12. Answer the following in 100 words.

(6x2=12)

- a) Who was Squire Cass? What do you think about his family and house?
- b) How is Silas Marner of Raveloe different from the Silas Marner of Lantern Yard in Eliot's Silas Marner?

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