

Ques

SET-A

Roll No.

Total No. of Printed Pages—16

601 R/E

(Regular/Ex-Regular)

E

(Science)

(For Students registered in 2021 and 2022)

2 0 2 4 (A)

ENGLISH

SCIENCE

Full Marks : 100

Time : 3 hours

The figures in the right-hand margin indicate marks

Answer all questions

Questions requiring short answers must be answered serially

Write the answers in your own words as far as practicable

(2)

1. Read the following extracts from the prescribed text and answer the questions that follow :

(a) Vaccine developments for polio had begun in the early 1900s. However, early attempts failed, partly because researchers did not know there was more than one virus. We now know that polio is caused by three strains of quite stable viruses that are a part of the enterovirus family, which have RNA as their genetic material. These viruses can remain infectious for long periods of time in water and foods. To be effective, a vaccine has to confer immunity against all three strains. Ironically, before the 1900s, immunity was acquired primarily during infancy because sanitation conditions were poor and efforts at sewage and water treatments were primitive. Babies were frequently exposed to polio-viruses. These infants did not contract the disease because their mothers'

(3)

antibodies were passed on to them through breast-feeding. The babies then developed their own antibodies to the virus.

Paradoxically, when sanitation improved, infants were no longer exposed at an age when they were protected, so they did not develop antibodies to the viruses. Consequently, when they were exposed to the virus in later childhood and adulthood, they were at risk to contract polio.

Questions :

2×5=10

(i) Why did the researchers fail in the early attempts at the development of polio vaccine?

(ii) How can a polio vaccine be effective?

(iii) Why were the infants at risk to contract polio in later childhood and adulthood?

(Continued)

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(Turn Over)

(iv) How do antibodies pass to babies?

(v) How was sanitation condition linked to the control of polio?

(b) We quail, money makes us quail.

It has got us down; we grovel before it in strange terror.

And no wonder, for money has a fearful cruel power among men.

But it is not money we are so terrified of, it is the collective money-madness

of mankind.

For mankind says with one voice :

How much is he worth?

Has he no money? Then let him eat dirt, and go cold.—

And if I have no money, they will give me a little bread so I do not die, but they will make me eat dirt with it. I shall have to eat dirt, I shall have to eat dirt

if I have no money.

It is that that I am frightened of.

And that fear can become a delirium.

It is fear of my money-mad fellow-men.

Questions :

$2 \times 5 = 10$

(i) Why does the poet say that money has a cruel power among men?

(ii) What kind of feeling does money create in us?

(iii) Is man really afraid of money or moneyed man?

(iv) How do money-mad men treat man without money?

(v) What turns man insane?

2. Read the following extract from the prescribed text and answer the questions that follow, each in about 70 words :

"Oh!" the doctor exclaimed. "You are exerting yourself too much. You must be quieter." He felt idiotic to be repeating it. "How fine it would be," he reflected, "to drop the whole business and run away somewhere without answering anybody

any question!" The patient clutched the doctor's wrist with his weak fingers and said, "Ramu, it is my good fortune that you are here at this moment. I can trust your word. I can't leave my property unsettled. That will mean endless misery for my wife and children. You know all about Subbiah and his gang. Let me sign before it is too late. Tell me ..."

"Yes, presently," replied the doctor. He walked off to his car, sat in the back seat and reflected. He looked at his watch.

Midnight. If the will was to be signed, it must be done within the next two hours, or never. He could not be responsible for a mess there; he knew too well the family affairs and about the wolves, Subbiah and his gang But what could he do? If he asked him to sign the will, it would virtually mean a death sentence and destroy the thousandth part of a chance that the patient had of survival. He got down from the car and went in. He resumed his seat in the chair. The patient was staring at him appealingly. The doctor said to himself, "If my word can save his life, he shall not die. He will be damned."

He called, "Gopal, listen." This was the first time he was going to do a piece of acting before a patient, stimulate a feeling and conceal his judgement. He stooped over the patient and said with deliberate emphasis, "Don't worry about the will now. You are going to live. Your heart is absolutely sound." A new glow suffused the patient's face as he heard it. He asked in a tone of relief, "Do you say so? If it comes from your lips it must be true ..."

The doctor said, "Quite right. You are improving every second. Sleep in peace. You must not exert yourself on any account. You must sleep very soundly. I will see you in the morning." The patient looked at him gratefully for a moment and then closed his eyes. The doctor picked up his bag and went out shutting the door softly behind him.

Questions :

5×2=10

- (a) What did compel Dr. Raman to tell a lie?
- (b) What was the impact of Dr. Raman's words on his patient, Gopal?

(8)

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

Being a high-strung woman, she was capable on occasions of turning panicky on some mishap happening to any of her children, but she restrained herself soon, and even in her worst panic she never went anywhere near the normal behaviour of Indian mothers on seeing accidents befalling their children. For example, if a one-year-old baby falls down from a height of, say, two feet, the first thing its mother would do would be to give out a hideous scream and begin to knock her head on the floor by way of mourning, on the assumption that the child was already dead and it was no use going to its help. My mother never gave such exhibition.

On the other hand, if we frightened her by giving a scream disproportionate to our injury the chances were that we should be getting some additional suffering to redress the disproportion. No one who has not

(9)

observed the behaviour of little children in India can have an adequate idea of the range of expansion of their mouths in self-pity and hope of external pity. The luxury of self-pity as well as of sympathy was severally rationed in our case. Yet no mother was capable of more business-like attendance on her children in sickness.

The faults of character she disliked most were falsehood, dishonesty, moral cowardice, and meanness. A liar, a cheat, a coward, and a person "with the tiny heart of minnow", as she put it, were the most contemptuous epithets we heard from her mouth. Not only did she condemn vice, she almost equally despised the tacit acceptance of an advantage.

Questions :

2×5=10

(a) How was the writer's mother different from Indian mothers?
(b) How do the Indian mothers react when a one-year-old baby falls down?

(10)

(c) What was the treatment given to her children at their screaming disproportionate to injury by the writer's mother?

(d) What did the mother dislike most?

(e) What did the mother condemn and despise?

4. (a) Find out the words/expressions in the passage in Q. No. 3 which mean the following : $1 \times 3 = 3$

- sadness for yourself
- unpleasant
- to correct something that is wrong

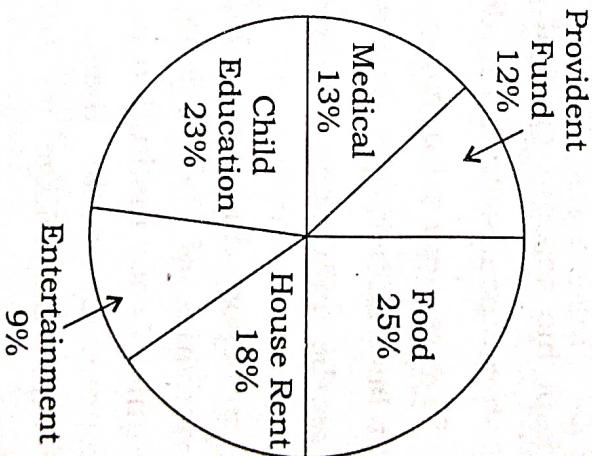
(b) Make sentences using the following : $1 \times 2 = 2$

- capable of
- give out

(11)

5. The following pie chart shows expenditure of a family in percentage. Write a paragraph, in about 70 words, interpreting the information given in the chart : 5

Expenditure of Family



6. A dictionary gives the following meanings for the word 'open'. The meanings are followed by sentences in which the word has been used. Match each meaning with its corresponding sentence : $1 \times 5 = 5$

Meanings :

- spread out

(ii) unprotected
(iii) start
(iv) frank
(v) not closed

Sentences :

(a) He kept his account open at a bank.
(b) The story opens with a murder.
(c) The flowers were all open.
(d) Don't lay yourself open to ridicule.
(e) Let me be quite open with you.

7. Prepare a report in about 200 words on the activities of the National Service Scheme unit of your institution in a village camp conducted on the theme 'Remove Illiteracy from the Village' for submission to the Principal.

Or

A village has been totally burnt by a fire accident. As a reporter of a popular daily newspaper, prepare a report in about 200 words, giving estimate of loss of human life, cattle and property to provide relief to the affected villagers.

8. Make notes, in outline form, on the main ideas of the passage given below :

A contagious disease is one that can be spread from person-to-person. In some cases, contagious diseases can become an epidemic or even a pandemic. An epidemic is a sudden disease outbreak that affects a large number of people in a particular region, community, or population. In an epidemic, the number of people affected by the disease is larger than what is normally expected. A pandemic is a disease epidemic that has spread to a large group of people across a large region, multiple nations, or continents.

While a disease might be contagious, it may have different effects on different people. Whether someone develops symptoms or not, is controlled by their level of immunity, which can be active or passive.

Active immunity means one's body produces antibodies to fight off the virus or another disease-causing agent. This

happens after a specific disease is introduced to the body, through previous infection or a vaccine. This immunity is usually permanent. Passive immunity means the antibodies are transferred from one person to another, like from mother to baby. Passive immunity usually

lasts a few weeks to a few months.

8

9. Write a summary of the passage in Q. No. 8, basing it on the outlines you have made.

10. Write an essay, in about 250 words, on any one of the following topics, developing the outlines given :

10

(a) The Value of Education

[Enables to understand the world—develops mental power—builds up character—helps to acquire skill to earn a living—education received outside schools and colleges—good and bad education—promotes nation building]

(b) A Fair You Have Visited

[Occasion of the fair—location and arrangements—your description of the shops and visitors—amusements—your personal experience—value of fairs]

11. Rewrite the following passage, correcting all the ten grammatical errors in it :

10

“Out through that window, three years ago to a day, her husband and her two young brothers went out for their day’s shooting. They never came back. In crossing the moor to their favorite snipe-shooting ground they were all three engulf in a treacherous piece of bog. It had been that dreadful wet summer, you know, and places that were safe in other years gave in suddenly without warning. Their bodies were never recovered. That was the dreadful part of it.” Here the child’s voice loses its self-possessed note and became falteringly human. “Poor aunt always thought that they will come back some day,

they and the little brown spaniel that was lost with them and walk at that window just as they used to do. That is why the window keeps open every evening till it is quite dusk. Poor dear aunt, she has often told me how they went out, her husband with his white waterproof coat over his arm, and Ronnie, her youngest brother, singing 'Bertie, why do you bound?' as he always did to tease her, because she said it gets on her nerves. Do you know, sometimes on still, quite evenings like this, I almost get a creepy feeling that they can all walk in through that window—".

She broke off with a little shudder. It was a relief to Franton when the aunt hustled into the room with a whirl of apologies for late in making her appearance.

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