

ENGLISH -12 (CORE)

READING COMPREHENSION

TYPE – I (Unseen Passages to Assess Comprehension, Interpretation, Inference and Vocabulary)

1. Read the passage given below.

- (1) In the past, coffee was generally regarded as being detrimental to heart health. Researchers believed that regularly drinking very strong coffee could increase blood pressure, increase cholesterol levels, and increase the risk of heart attack and cardiac arrhythmias. They even isolated fat like chemicals, 'cafestol' and 'kahweol', responsible for the rise of cholesterol levels.
- (2) It turned out that the European brewing method – boiling water sits on the coffee grounds for several minutes before straining – produces high concentrations of cafestol and kahweol. By contrast, the filter and percolation methods remove all but a trace of these chemicals. Moreover, the studies involved large amounts of coffee – five to six cups a day. Moderate coffee drinkers drink only two cups.
- (3) Research has also shown that regular, moderate coffee drinking does not dangerously raise blood pressure. And studies have failed to substantiate fears that coffee might trigger abnormal heart rhythms (arrhythmias) in healthy people.
- (4) "For heart disease, I think the issue is closed," says Meir Stampfer, an epidemiologist at Harvard who has studied many aspects of coffee and health. "Coffee drinking at reasonable levels is unrelated to heart risk."
- (5) Evidence suggests that coffee may help fend off Parkinson's disease. A 30-year study of 8000 Japanese-American men found that avid coffee drinkers had one-fifth the risk of those who didn't drink the brew.
- (6) Scientists at Massachusetts General Hospital, USA, found indirect evidence that caffeine – the habit forming stimulant in coffee – may actually combat Parkinson's disease. The caffeine seemed to protect mice brain cells from depletion of the nerve chemical dopamine – the problem underlying Parkinson's disease in humans. However, these are preliminary findings; human studies have now consistently supported caffeine's protective role.
- (7) The studies on coffee and cancer have focused on these organs – and are reassuring. You may remember a brief coffee scare in the early 1980s when a single study linked coffee with pancreatic cancer. A false alarm! Many studies since then have shown that the association is either extremely weak or non-existent.
- (8) If there's a connection between coffee and bladder cancer, it possibly applies just to coffee junkies. A reanalysis of ten European studies found an increased risk only among people who drank ten or more cups a day. And studies show that coffee seems to have no adverse influence on the risk of colon cancer.
- (9) Caffeine is such a powerful stimulant that the International Olympic Committee and the National Collegiate Athletic Association set limits on how much can remain in the blood during competition. In addition to boosting physical endurance, caffeine increases alertness and improves mood. The buzz may come at a price, though. People who drink more than they're used to may become restless and unable to sleep. Moreover, it's possible to become physically dependent on caffeine in days.

- (10) The question now arises: how much to drink? Those with heart burn and anxiety may want to see if cutting back coffee improves their condition. For most people, however, there's virtually no risk in consuming up to three normal cups a day. Harvard's Stampfer tries to keep his coffee drinking irregular enough to avoid habituation: "That way, I can get a buzz when I feel like it."

On the basis of your understanding of the above passage, answer ANY TEN questions from the eleven given below by choosing the best option.

- (i) **Paragraph 1 of the passage mainly deals with the**
- (a) causes of heart attack in humans
 - (b) ill effects of drinking too much coffee
 - (c) benefits of drinking strong coffee
 - (d) beliefs and superstitions related to drinking coffee
- (ii) **Which of the following methods leaves only a bit of 'cafestol' and 'kahweol'?**
- (a) filter and percolation method
 - (b) European brewing method
 - (c) instant method
 - (d) boiling method
- (iii) **"..... I think the issue is closed." (Paragraph 4). What issue does Meir Stampfer consider as closed?**
- (a) That drinking regular, moderate coffee causes an increase in blood pressure
 - (b) That drinking excessive coffee does not trigger heart attack in healthy people
 - (c) That healthy people will experience abnormal heart rhythms when they consume moderate coffee
 - (d) Both (a) and (b)
- (iv) **"Caffeine may actually combat Parkinson's disease". Pick the option in which the meaning of 'combat' is NOT the same as it is in the passage.**
- (a) There was a fierce *combat* between the two sides.
 - (b) A vaccine has been developed to *combat* the spread of corona virus.
 - (c) The Government is taking strict measures to *combat* terrorism in the country.
 - (d) We must *combat* extravagance and waste.
- (v) **The consumption of caffeine present in coffee Parkinson's disease.**
- (a) completely cures
 - (b) causes
 - (c) fights
 - (d) spreads
- (vi) **A study of 8000 Japanese-American men found that men who drank coffee had chance of getting Parkinson's disease than those who did not consume coffee.**
- (a) 25% more
 - (b) 25% less
 - (c) 20% more
 - (d) 20% less
- (vii) **What 'false alarm' about coffee does the author talk about in paragraph 7 of the passage?**
- (a) That drinking coffee in moderation prevents pancreatic cancer
 - (b) That drinking coffee in moderation increases the risk of bladder cancer
 - (c) That drinking excessive coffee increases the risk of pancreatic cancer
 - (d) That drinking excessive coffee prevents pancreatic cancer

- (viii) The author has used the expression 'coffee junkies' in paragraph 8 to refer to people who**
- (a) produce or sell coffee (c) do not drink coffee at all
 (b) drink coffee in moderation (d) are crazy about consuming coffee
- (ix) Which of the following statements is NOT TRUE about caffeine?**
- (a) It is a powerful stimulant and extremely addictive.
 (b) It decreases anxiety and helps sleep better.
 (c) It increases alertness and improves mood.
 (d) It boosts our physical endurance.
- (x) Researchers believe that it is safe to consume up to normal cups of coffee a day.**
- (a) two (c) four
 (b) three (d) ten
- (xi) Stampfer avoids drinking coffee regularly because he**
- (a) knows it is very addictive (c) is not very fond of it
 (b) cannot afford it (d) is unaware of its health benefits

ANSWERS

- (i) (b)** ill effects of drinking too much coffee
- (ii) (a)** filter and percolation method
- (iii) (c)** That healthy people will experience abnormal heart rhythms when they consume moderate coffee
- (iv) (a)** There was a fierce combat between the two sides.
- (v) (c)** fights
- (vi) (d)** 20% less
- (vii) (c)** That drinking excessive coffee increases the risk of pancreatic cancer
- (viii) (d)** are crazy about consuming coffee
- (ix) (b)** It decreases anxiety and helps sleep better.
- (x) (b)** three
- (xi) (a)** knows it is very addictive

2. Read the passage given below.

DANGER FROM SPACE

- (1) Man, it seems is living on borrowed time. There are not one or two, but thousands of dangers looking the face of the earth. These are like the proverbial Damocles' Sword hanging on us in space. They are the celestial bodies – asteroids, minor planets and comets that haphazardly orbit in space, not too far from the earth. These bodies are a part of the debris left over after the solar system's formation. Many of them are as big as 800 km in diameter.
- (2) Like other planets, these too go round the sun and if any of them happens to cut across our earth's path, it could lead to an unimaginable catastrophe, beginning with an intense flash around the horizon and filling the sky with a glare thousands times more intense than our sun. Anybody

looking at it is sure to be blinded instantly. Then would follow an unbearable boom, as if the skies were going to tear apart. And the whole earth would tremble. It would appear that some heavenly hammer, determined to crush our planet, has hit it with great force.

- (3) This is not an imaginary scenario taken from science fiction. Such incidents (or accidents) have really taken place on earth during the last 4.60 billion years of its existence. And each time it resulted in the extermination of higher life forms. The last time some 65 million years ago, an asteroid or comet measuring 10 to 20 km in diameter, crashed into our planet, wiping out not only the dinosaurs but also about 70 percent of all plant and animal species then present on the earth.
- (4) Today, if a meteorite of merely one kilometer in diameter were to fall on Delhi, it will cause a million times more devastation than the atom bomb that was dropped on Hiroshima. Nearly 300 km area around Delhi will become barren like the moon. Big cities like Delhi, Agra, Chandigarh and Jaipur will become a thing of the past. Dust and rock bits raised due to the collision and fumes from the resulting fires will engulf the earth and block the sun resulting in nights that never end for years. In the absence of the sun, whose energy they use to synthesize their food, plants will die. All life-forms depend on plants for food. With withering away of the plants, other organisms including man, will starve to death.
- (5) Barely a few years back, scientists were not serious about such a catastrophe. But then we witnessed the now famous collision of comet Schumacher Levy with Jupiter, the biggest planet of our solar system. Mere twenty bits of the comet, most not bigger than a mile in size, rammed into Jupiter, producing such a strong glare that it was even visible from the earth.
- (6) You might have often seen shooting stars on a clear night. These are not stars. These are meteorites, tonnes of which annually rain upon the earth. Actually most of them are so small, almost like pebbles, that they are burnt up by the air-friction in the atmosphere, before reaching the earth. Sometimes a few bigger ones escape total burning and are found as stones in the fields.
- (7) Developed countries like the USA and Russia have underground seismographs at numerous points that register tremors set in not only by earthquakes but also by meteorite impact. Till recently, such information was kept secret. But with the end of the cold war this has now become available to the astronomers. These reveal that from 1970 to 1992, at least 132 meteorites collided with the earth. Put together, some of them had a devastating power equivalent to about 15,000 tonnes of TNT, or the bomb dropped on Hiroshima. Usually these explosions pass undetected for about 90 percent of earth's area, including oceans, is barren and unpopulated.
- (8) Scientists are now taking meteorites rather seriously. Previously, they assumed that the earth suffered a devastating meteorite hit once every 100 million years. But now they believe that such collisions could occur every 10 million years. Soon after the Jupiter collision, an expert committee, comprising space and defence scientists, was set up in the USA to suggest a way to prevent such mishaps. One of their suggestions was that such approaching comets or meteorites be burnt or blown up using nuclear warheads. Another proposal was shattering it up with bullets of tungsten like hard metal. But recent studies show that most of the meteorites are highly brittle and their smallest bits would cause more devastation than an intact one.

On the basis of your understanding of the above passage, answer ANY TEN questions from the eleven given below by choosing the best option.

- (i) **For human beings, one of the first effects of the collision of an asteroid or a meteorite with the earth will be that they will**
- (a) be blinded by an intensely bright light
 - (b) hear an unbearable boom
 - (c) feel the whole earth trembling
 - (d) see skies being torn apart
- (ii) **The celestial bodies can bring catastrophe on the earth if they**
- (a) stop going round the sun
 - (b) collide with the earth
 - (c) increase in their size
 - (d) turn into debris in the space
- (iii) **Which of the following statements is correct in the context of the passage?**
- (a) An asteroid measuring 10-20 kms is most likely to destroy all life on earth in near future.
 - (b) Asteroids have been hitting the earth with catastrophic results for over 65 million years now.
 - (c) Asteroid hitting the earth is a piece of science fiction or figment of imagination.
 - (d) More than 60 million years ago a majority of life on earth was destroyed by an asteroid.
- (iv) **Pick the option showing the correct use of the word 'extermination'.**
- (a) When did you have your last physical *extermination*?
 - (b) Bad weather led to the *extermination* of the game.
 - (c) International measures have been taken to prevent the *extermination* of the whale.
 - (d) The *extermination* of tourism brought great prosperity to the island.
- (v) **What will happen when the sun is blocked following a meteorite or comet collision with the earth?**
- (a) There will be never-ending nights due to engulfing fire.
 - (b) There will be extermination of all life forms on earth.
 - (c) both (a) and (b)
 - (d) neither (a) nor (b)
- (vi) **When did scientists become serious about the possibility of a catastrophe due to a comet or meteorite collision with the earth?**
- (a) when meteorites started raining upon the earth
 - (b) when severe earthquakes occurred due to meteorite impact
 - (c) when atomic bombs were dropped on Hiroshima
 - (d) when Schumacher Levy collided with Jupiter
- (vii) **Pick the option in which the meaning of the expression 'rammed into' is NOT the same as used in paragraph 5 of the passage?**
- (a) Another driver ignored a red light and rammed into us in the middle of the intersection.

- (b) He didn't see the dining room table and rammed right into it.
 - (c) The toddler rammed the shopping cart into the man's thigh.
 - (d) He rammed his fist into Bill's side and shouted something angry at him.
- (viii) Most meteorites don't actually get to reach the earth because**
- (a) they are destroyed in the space itself by the scientists
 - (b) they burn up in the earth's atmosphere
 - (c) they are no bigger than the size of pebbles
 - (d) their surfaces are much too hot
- (ix) Which of the following statements about meteorites is NOT TRUE according to the passage?**
- (a) Meteorites are not actually stars although they are often called shooting stars.
 - (b) Most meteorites are very small in their size.
 - (c) No meteorite can escape being burned in the earth's atmosphere.
 - (d) Tonnes of meteorites fall on the earth every year.
- (x) End of cold war has benefitted mankind in many ways. Which of the following benefits is mentioned in the passage?**
- (a) Meteorite information can now be gathered.
 - (b) Many countries now have underground seismograph stations.
 - (c) Information on meteorites is now freely shared with scientists worldwide.
 - (d) The world is no longer under the threat of a nuclear war.
- (xi) Shattering or blowing up dangerous looking meteorites may not be a good idea probably because**
- (a) the costs involved are much too high for the mankind
 - (b) small pieces of smashed meteorites may cause greater destruction
 - (c) harmful nuclear radiation may spread in the space surrounding the earth
 - (d) such missions spell doom for the earth if they fail

ANSWERS

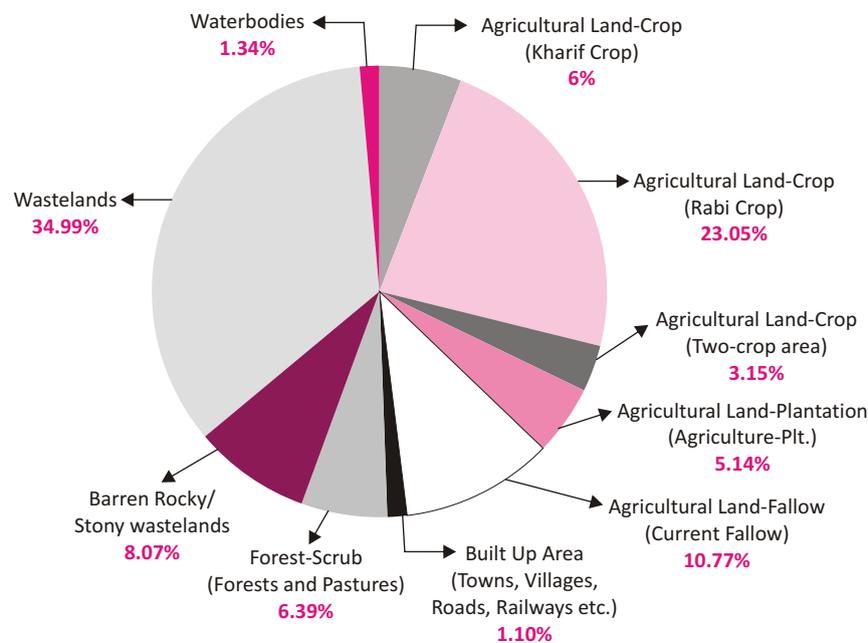
- (i)** (a) be blinded by an intensely bright light
- (ii)** (b) collide with the earth
- (iii)** (d) More than 60 million years ago a majority of life on earth was destroyed by an asteroid.
- (iv)** (c) International measures have been taken to prevent the *extermination* of the whale.
- (v)** (c) both (a) and (b)
- (vi)** (d) when Schumacher Levy collided with Jupiter
- (vii)** (d) He rammed his fist into Bill's side and shouted something angry at him.
- (viii)** (b) they burn up in the earth's atmosphere
- (ix)** (c) No meteorite can escape being burned in the earth's atmosphere.
- (x)** (c) Information on meteorites is now freely shared with scientists worldwide.
- (xi)** (b) small pieces of smashed meteorites may cause greater destruction

TYPE – II (Unseen Case-based Factual Passages)

1. Read the following report regarding land use in India.

- (1) Land is a scarce resource, whose supply is fixed for all practical purposes. At the same time, the demand for land for various competing purposes is continuously increasing with the increase in human population and economic growth.
- (2) Land use pattern at any given time is determined by several factors including size of human and livestock population, the demand pattern, the technology in use, the cultural traditions, the location and capability of land, institutional factors like ownership pattern and rights and state regulations. The land use pattern, besides having economic implications, has also important ecological dimensions, which, if ignored, can have disastrous consequences.

The pattern of land utilisation in India is indicated in the given pie chart.



- (3) The available land is classified into two main parts on the basis of its use, viz. (i) agricultural land and (ii) non-agricultural land.
- (4) Agricultural land (also agricultural area) denotes the land suitable for agricultural production, both crops and livestock. It includes net sown area, current fallows and land under miscellaneous trees, crops and groves. Agricultural land in India totals a little over 50 per cent of the total geographical area in the country. This is the highest among the large and medium-sized countries of the world.
- (5) This indicates:
 - (i) The influence of favourable physical factors (like size, extent of plains and plateaus, etc.) and
 - (ii) The extension of cultivation to a large proportion of the cultivable land.
- (6) But, because of the large population of the country, the per capita arable land (*i.e.* land suitable for agriculture) is low: 0.16 hectares against the world average of 0.24 hectares. About 15 per cent of the sown area is multi-cropped.

- (7) While, most of the multi-cropped area is irrigated, only one-fourth of the gross cropped area is irrigated. The security provided by the irrigation facilities is a major factor in intensive application of labour and other inputs to obtain high yields.
- (8) Non-agricultural land includes: (i) land under forests and permanent pastures, (ii) land under other non-agricultural uses (towns, villages, roads, railways, etc.) and (iii) land classified as cultivable waste as well as barren and uncultivated land of mountain and desert areas.

GLOSSARY: *Fallow : land left unsown to restore its fertility

On the basis of your understanding of the passage, answer ANY TEN questions from the eleven that follow.

(i) Land is a scarce resource because

- (a) its availability is limited (c) its demand is continuously decreasing
(b) its demand is fixed (d) it restricts economic growth

(ii) The demand for various purposes of land use depends on

- (a) human civilization and type of land (c) cultivable and non-cultivable land
(b) human population and economic growth (d) technology and kind of location

(iii) The word 'implications' as used in paragraph 2 means

- (a) causes (c) consequences
(b) uses (d) challenges

(iv) Based on the data given in the pie chart, the combined agricultural land under kharif and rabi crops is

- (a) 6% (c) 29.05%
(b) 23.05% (d) 17.05%

(v) Which of the following statements are NOT TRUE in the context of the passage?

1. Land is a limited resource.
2. Growing population and economic growth result in decrease in the demand for land.
3. The land suitable for agricultural production in India is less than 50% of the total geographical area in the country.
4. Improper utilization of land can lead to serious ecological consequences.

- (a) 1 and 2 (c) 3 and 4
(b) 2 and 3 (d) 2 and 4

(vi) 'Fallow land' means

- (a) uncultivated land (c) infertile land
(b) cultivated land (d) waste land

(vii) Which of the following is the effect of population explosion in India?

- (a) Agriculture land has become less than half the geographical area of the country.
(b) Agriculture land in the country has become less than that of other large and medium-sized countries of the world.

- (c) The per capita arable land in the country has become lower than the world average.
- (d) Very little multi-cropped area in the country has become irrigated.

(viii) Which of the following options states the correct percentage of gross cropped area in the country that is irrigated?

- (a) 15%
- (b) 16%
- (c) 20%
- (d) 25%

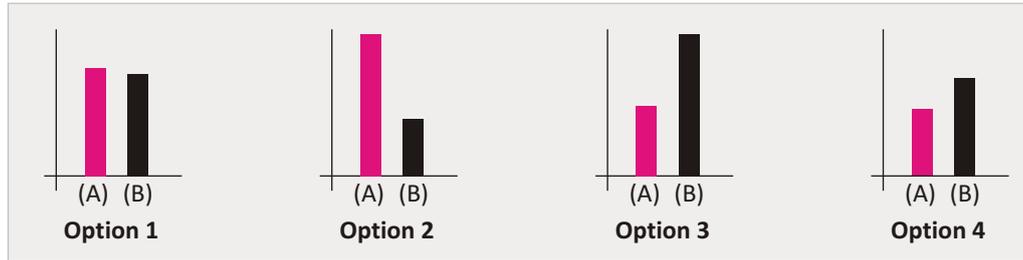
(ix) High yields of crops can be obtained from agricultural land with the help of which of the following options?

1. irrigation facilities
2. security of farmlands
3. skilled labour
4. multi-crop farming

- (a) 1 and 2
- (b) 2 and 3
- (c) 1 and 3
- (d) 3 and 4

(x) Which of the following bar graphs correctly display the area occupied by:

- A. Waterbodies
- B. Built up towns & villages, roads, railways etc.



- (a) Option 1
- (b) Option 2
- (c) Option 3
- (d) Option 4

(xi) Based on the data given in the pie chart, choose the option that lists the statement that is TRUE with respect to the non-agricultural land in the country.

- (a) The land under forests is more than the land that is classified as 'wastelands'.
- (b) The land used to build roads, railways, towns etc. is less than 1% of the total non-agricultural land.
- (c) The barren and uncultivated land of mountains and desert areas is the same as that of forests.
- (d) The total land area of forests and pastures is less than that of the wastelands.

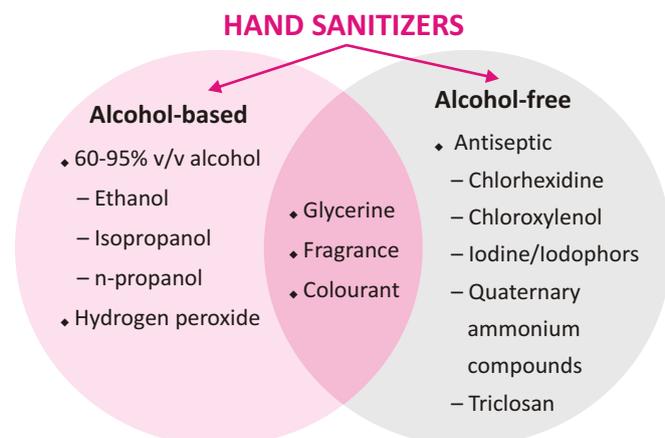
ANSWERS

- (i) (a) its availability is limited
- (ii) (b) human population and economic growth
- (iii) (c) consequences
- (iv) (c) 29.05%

- (v) (b) 2 and 3
- (vi) (a) uncultivated land
- (vii) (c) The per capita arable land in the country has become lower than the world average.
- (viii) (d) 25%
- (ix) (c) 1 and 3
- (x) (a) Option 1
- (xi) (d) The total land area of forests and pastures is less than that of the wastelands.

2. Read the following news report on the use of hand sanitizers.

- (1) Till date no medication or vaccine is available to cope with the COVID-19 infection and the infection rate is increasing drastically across the globe. Only preventive measures and healthy lifestyle with an efficient immune system have been recommended by WHO to fight and stay safe from COVID-19. WHO has suggested alcohol-based hand sanitizers which are mainly made up from ethanol, isopropyl alcohols and hydrogen peroxides in different combinations for frequent hand hygiene.
- (2) Hand sanitizers are everywhere. They are cheap, effective disinfectants, and many are easy to carry around. But lately, these products have been scrutinized for the potential harm they can have on children. "Many caregivers are unaware of the very high alcohol content present in alcohol-based hand sanitizers, which can contain up to 60% to 95% alcohol," says Cynthia Santos, MD, from CDC's National Center for Environmental Health. "Young children may inadvertently consume these hand sanitizers because of their appealing scents like apple, vanilla, and citrus."
- (3) These preparations may become toxic to human health and environment when misused. These chemicals have known toxic and hazardous impact on environment when released by evaporation. In early five months of 2020, American Association of Poison Control Center reported 9504 alcoholic hand sanitizer exposure cases in children under the age of 12 years and recognized that even a small amount of alcohol can cause alcohol poisoning in children that is responsible for confusion, vomiting and drowsiness, and in severe cases, respiratory arrest and death. Furthermore, frequent usage of hand sanitizers has reported increased chance of antimicrobial resistance and chance of other viral diseases. Citizens must be aware about the toxic and serious health risks to humans as well as to the environment by frequent use of hand hygiene products, especially with alcohol-based formulations.
- (4) Even the non-alcohol-based hand sanitizers can cause ocular irritation, vomiting, conjunctivitis, oral irritation, cough, and abdominal pain. Rare effects include coma, seizure, hypoglycemia, metabolic acidosis, and respiratory depression. Therefore, health care providers, including pharmacists, should inform patients, parents, and care givers about the potential dangers associated with hand sanitizers.



On the basis of your understanding of the report, answer ANY TEN questions from the eleven that follow.

- (i) According to the passage, COVID-19 infection rate across the world is increasing
- (a) constantly (c) negligibly
(b) slowly (d) sharply
- (ii) Pick the option that lists the recommendations of WHO to stay safe from COVID infection.
- (1) no medication and no vaccine
(2) preventive measures and healthy lifestyle
(3) efficient immune system
(4) non-alcohol-based hand sanitizers
- (a) 1 and 2 (c) 1 and 4
(b) 2 and 3 (d) 2 and 4
- (iii) Ethanol, isopropyl alcohol and hydrogen peroxide are all of alcohol-based hand sanitizers.
- (a) end products (c) ingredients
(b) by-products (d) types
- (iv) Young children unknowingly consume hand sanitizers because they are attracted by its
- (a) taste (c) colour
(b) fragrance (d) packaging
- (v) Chemicals present in hand sanitizers can have harmful impact on the environment when they
- (a) precipitate (c) condensate
(b) evaporate (d) escape
- (vi) The American Association of Poison Control Center's report on children under the age of 12 highlights the
- (a) side effects of consuming too much alcohol
(b) need of using alcoholic hand sanitizers more frequently
(c) effective treatment for confusion, vomiting and drowsiness
(d) severity of even a little exposure of alcoholic hand sanitizer
- (vii) Which of the following side effects mentioned in the passage is common to both the alcohol and non-alcohol-based hand sanitizers?
- (a) confusion (c) abdominal pain
(b) vomiting (d) death
- (viii) It is the duty of to provide vital information about the potential dangers associated with frequent use of hand sanitizers.
- (a) health care providers and parents (c) pharmacists and patients
(b) care givers, parents and patients (d) pharmacists and health care providers
- (ix) According to the given web diagram, which of the following is common to both types of hand sanitizers?

- (a) ethanol (c) glycerine
(b) hydrogen peroxide (d) iodine

(x) The author use of hand sanitizers.

- (a) finds fault with the WHO guidelines on the (c) is totally against the
(b) cautions against the reckless or careless (d) recommends a generous

(xi) The word 'ocular' as used in paragraph 4 of the passage refers to something related to

- (a) eyes (c) teeth
(b) ears (d) skin

ANSWERS

- (i)** (d) sharply
(ii) (b) 2 and 3
(iii) (c) ingredients
(iv) (b) fragrance
(v) (b) evaporate
(vi) (d) severity of even a little exposure of alcoholic hand sanitizer
(vii) (b) vomiting
(viii) (d) pharmacists and health care providers
(ix) (c) glycerine
(x) (b) cautions against the reckless or careless
(xi) (a) eyes