Yuvashakti Model School
shiksha aur sanskriti

Class-IX
Winter Holiday
Homework

Time: 3 HOURS   M.M: 80

General Instructions:

i)   Attempt all the questions.
ii) All the answers must be correctly numbered as given in the question paper and
     written in the answer sheet.

SECTION A (READING)

Q.1 Read the following passage and answer the questions that follow:

1. Held every year on 21 May, UNESCO leads the celebration of World Day for Cultural
    Diversity for Dialogue and Development highlighting not only the richness of the world's
    cultures, but also the essential role of intercultural dialogue for achieving peace and
    sustainable development.

2. A recent international emergency has proved the intrinsic value of the cultural and creative
    sector at generating social cohesion, educational resource or personal well-being in times
    of crisis. It has also underscored the sector's potential to generate economic growth,
    something which is too often underestimated. With the adoption in September 2015 of the
    2030 Agenda for Sustainable Development by the United Nations, and the resolution on
    Culture and Sustainable Development adopted by the UN General Assembly in December
    2015, the message of the World Day for Cultural Diversity for Dialogue and Development is
    more important than ever. The 17 Sustainable Development Goals (SDGs) can best be
    achieved by drawing upon the creative potential of the world's diverse cultures and engaging
    in continuous dialogue to ensure that all members of society benefit from sustainable
    development.

3. Bridging the gap between cultures is urgent and necessary for peace, stability and
    development. Cultural diversity is a driving force of development, not only with respect to
    economic growth, but also as a means of leading a more fulfilling intellectual, emotional,
    moral and spiritual life. This is captured in the culture conventions, which provide a solid
    basis for the promotion of cultural diversity. Cultural diversity is thus an asset that is
    indispensable for poverty reduction and the achievement of sustainable development. At
    the same time, acceptance and recognition of cultural diversity in particular through
    innovative use of media and Information and Communications Technologies (ICTs) are
    conducive to dialogue among civilizations and cultures, respect and mutual understanding.

i) Based on the reading and understanding of the above passage, list 2 points to describe the
purpose of UNESCO leading the celebration of World Day for Cultural Diversity for Dialogue
and Development.

ii) Examine in about 40 words how Sustainable Development Goals can be achieved.

iii) Discuss "Cultural diversity is an asset."

iv) Complete the sentence appropriately:

a) The Second Committee of UN General Assembly in 2015 adopted

_____

b) ____is urgent and necessary for peace, stability and development.

v) Pick up a word from the passage that means "deep-rooted".(from Para 2)

vi) The meaning of the word "important" given in the third paragraph is:
   i) achievement   ii) indispensable   iii) captured
   iv) intellectual

Q.2 Read the passage given below and answer the questions that follow:

1. If you're like most kids, you may love snow. Not only can it get you out of school, but it's also fun to play with. Who doesn't love to sled and build snowmen? Snow can also be dangerous, too. You may have heard your parents talk about how difficult it can be to drive in snow. Car accidents aren't the only dangers created by snow. If you're ever skiing in the mountains, you'll want to be aware of avalanches. An avalanche is a sudden flow of snow down a slope, such as a mountain. The amount of snow in an avalanche will vary based on many things, but it can be such a huge pile that it can bury the bottom of a slope in dozens of feet of snow.

2. Avalanches can be caused by many things. Some of them are natural. For example, new snow or rain can cause built up snow to loosen and fall down the side of a mountain. Earthquakes and the movement of animals have also been known to cause avalanches. Artificial triggers can also cause avalanches. For example, snowmobiles, skiers, gunshots and explosives have all been known to cause avalanches. Avalanches usually occur during the winter and spring, when snowfall is greatest. As they are dangerous to any living beings in their path, avalanches have destroyed forests, roads, railroads and even entire towns.

3. Warning signs exist that allow experts to predict - and often prevent - avalanches from occurring. When over a foot of fresh snow falls, experts know to be on the lookout for avalanches. Explosives can be used in places with massive snow build-ups to trigger smaller avalanches that don't pose a danger to persons or property. When deadly avalanches do occur, the moving snow can quickly reach over 80 miles per hour. Skiers caught in such avalanches can be buried under dozens of feet of snow. While it's possible to dig out of such avalanches, not all are able to escape.

4. If you get tossed about by an avalanche and find yourself buried under many feet of snow, you might not have a true sense of which way is up and which way is down. Some avalanche victims have tried to dig their way out, only to find that they were upside down and digging themselves farther under the snow rather than to the `top! Experts suggest that people caught in an avalanche try to "swim" to the top of the moving snow to stay close to the surface. Once the avalanche stops, do your best to dig around you to create a space for air, so you can breathe easier. Then, do your best to

figure out which way is up and dig in that direction to reach the surface and signal rescuers.

i) What is an avalanche?

ii) Comment on warning signs exist which allow experts to predict avalanches in two sentences.

iii) Which are the natural causes of an avalanche?

iv) What should one do when caught in an avalanche?.

v) Complete the sentences   :

a) _____ and the movement of animals have also been known to cause avalanches.

b) _____ can be used in places with massive snow build-ups to trigger smaller avalanches.

SECTION B (WRITING & GRAMMAR)

Q.3 You recently visited the Children's Park, a favourite place for all children, in your city. Write a descriptive paragraph about 100-120 words.   5

Q.4 Write a story in about 100-20 words based on the given clue. .
   A poor lady at a traffic red light had a doctor's prescription. She wanted ……………..

Q.5 Read the passage given below and fill in the blanks by choosing the most appropriate word from the given options:

Democracy also means (a)_____ all citizens are free (b)_____express their opinion (c) _____ public. The government on the other hand (d) _____expected to consider the views of the people.

(a)	i) that	ii) of	iii) to	iv) from
(b)	i) a	ii) an	iii) to	iv) one
(c)	i) were	ii) was	iii) are	iv) in
(d)	i) a lot of	ii) any	iii) less	iv) is

Q.6 Rearrange the following words or phrases into meaningful sentences:

(a) very faithful/science/a/is/mankind/servant/of

(b) producing goods/helps in/large/at/scale/it/a

(c) the/ of/science/nature/study/is

Q.7 The following passage has not been edited. There is an error in each line. Write the incorrect word and the correction in the space provided.

	Incorrect	Correct
Tsunami is a series in waves generated in	(a) ……..	……..
a body from water through an impulsive disturbance	(b) ……..	……..
causing damage to property or loss of life.	(c) ……..	……..

SECTION C (LITERATURE)

Q.8 Read the given extract and answer the questions that follow:

Kathmandu is vivid, mercenary, religious, with small shrines to flower-adorned deities along the   narrowest and busiest streets; with fruit sellers, hawkers of postcards; shops selling western cosmetics, film rolls and chocolate; or copper utensils and Nepalese antiques. Film songs blare out from the radios, car horns sound, bicycle bells ring, stray cows low questioningly at motorcycles, vendors shout their wares.
a) Name the chapter and the author.
b) Describe Kathmandu.

c) Name the two temples the author visited in Kathmandu.

Q.9 Read the given stanza and answer the questions that follow:
A slumber did my spirit seal-
I had no human fears.
She seemed a thing that could not feel
The touch of earthly ears.
No motion has she now, no force-
She neither hears nor sees,
Rolled around in earth's diurnal course
With rocks and stones and trees.

a) Name the poem and the poet.
b) The word 'slumber' means _____.
c) 'Earth's diurnal' course means _____.
d) Why could 'she' not hear anything?

Q.10 Answer the following questions in 40-50 words. (Any 3)   (3 x 3)

a) Why did Margie hate school?

b) Why was Einstein's mother against his marriage with Mileva?

c) Why does the Intruder break into Gerrard's house?

d) What is the central idea of the poem 'Rain on the Roof'?

Q.11 Answer the following questions in 40-50 words. (Any 3)   (3 x 3)

a) Who helped the lost child and how?

b) Toto was a mischievous pet. Discuss.

c) Why did Mahendra decide to leave the haunted place?

d) What was the mystery the guru shared with the king?

Q.12 The best way to deal with a crisis is not to lose your calm. Discuss this statement with reference to the behaviour of Gerrard in the play?

Q.13 How was Sergei and Olga were responsible to bring out positive change in the begger?

HINDI

कालांश – 3 घंटे   अधिकतम अंक – 80

सामान्य निर्देश :-

क) सभी प्रश्न अनिवार्य हैं
ख) सभी प्रश्नों के अंक उनके सामने दिए गए हैं।

खंड 'अ'
(अपठित गद्यांश)

प्रश्न1. निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़कर इसके आधार पर सर्वाधिक उपयुक्त उत्तर वाले विकल्प चुनकर लिखिए।   (7)

विनम्रता चरित्र का सद्गुण है। सुसंस्कृत होने का परिचय-पत्र। यह चुंबक की तरह अपने संपर्क में आने वाले को बरबस अपनी ओर खींच लेता है। विनम्र व्यक्ति की बोली मृदुल, आचरण शिष्ट तथा भावनाएँ निजता से ओत-प्रोत होती हैं। दीनता विनम्रता नहीं होती। दीन याचक होता है, जबकि विनम्र दाता। वह प्यार बाँटता है, जुड़ाव पैदा करता है और मेल-मिलाप की पृष्ठभूमि तैयार करता है। उनके मन में विपरीत विचार वालों के साथ भी सामंजस्य बैठाने की धारणा बनी रहती है।

आगंतुक का प्रसन्नतापूर्वक स्वागत करना, अपने से बड़ों द्वारा आसन ग्रहण करने पर ही आसन ग्रहण करना ऐसी प्राथमिक आदतें हैं जो विनीत व्यक्ति की पहचान कराती हैं। जिसके प्रति हम विनम्र हैं, वह हमारी उपेक्षा कर रहा है अथवा हमारी विनम्रता को हमारी कमजोरी समझ रहा है

तो अपने स्वाभिमान की रक्षा करते हुए उसे समझाना चाहिए। पर इस व्यवहार में दंभ नहीं होना चाहिए। यदि हम दूसरे से विनम्र व्यवहार की अपेक्षा करते हैं तो वे हम से भी वैसा ही अपेक्षा करेंगे। नदियों के पानी से कभी समुद्र में बाढ़ नहीं आती। नदियाँ अपने पानी के साथ बहुत सारी चीजें बहाकर ले आती हैं पर समुद्र अपनी सीमा में रह कर भी उन सबको अपने में समा लेता है। यह सागर का अपना विनम्र अनुशासन ही तो है।

(1) विनम्र व्यक्ति के मन में विपरीत विचार वालों के लिए कैसी धारणा बनी रहती है ?   (1)

(क) असामंजस्य ना बैठाने की धारणा
(ख) सामंजस्य बैठाने की धारणा
(ग) सामंजस्य ना बैठाने की धारणा
(घ) असामंजस्य बैठाने की धारणा

(2) विनम्रता किसका परिचय-पत्र है ?   (1)

(क) संस्कृत न होने का
(ख) संस्कृत होने का
(ग) सुसंस्कृत होने का
(घ) असंस्कृत होने का

(3) निम्नलिखित अभिकथन (A) तथा कारण (R) को ध्यानपूर्वक पढ़िए। उसके बाद दिए विकल्पों में से सही विकल्प चुनकर लिखिए।   (1)

अभिकथन (A) : विनम्रता चरित्र का सद्गुण है।

कारण (R): विनम्रता दीनता नहीं होती।

(क) अभिकथन (A) सही है, पर कारण (R) सही नहीं है।

(ख) अभिकथन (A) सही है, तथा कारण (R) भी सही है।

(ग) अभिकथन (A) सही है, लेकिन कारण (R) अभिकथन (A) की सही व्याख्या नहीं करता है।

(घ) अभिकथन (A) सही है तथा कारण (R) सही व्याख्या करता है।

(4) विनम्र व्यक्ति का क्या कार्य होता है ?   (2)

(5) जब कोई हमारी विनम्रता को हमारी कमजोरी समझने लगे तो हमें क्या करना चाहिए ?
(2)

प्रश्न 2. निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़कर इसके आधार पर सर्वाधिक उपयुक्त उत्तर वाले विकल्प चुनकर लिखिए। **(7)**

बड़े-बड़े कल-कारखाने बेशुमार धुआँ उगलते हैं। उनके कारण वायु प्रदूषण बढ़ गया है। कारखानों से लगातार कचरे निकल रहे हैं जो प्रायः जलाशयों में प्रवाहित कर दिए जाते हैं। कहीं-कहीं खुली भूमि में भी कचरे डाले जाते हैं। इन कचरों में बहुत तरह के जहरीले रसायन होते हैं जो हवा, पानी और भूमि को दूषित करते हैं। हमारे पूर्वज वायुमंडल की शुद्धता को बनाए रखने के लिए हवन करते थे और पेड़ों को काटने की अपेक्षा लगाने पर जोर देते थे। वेदों में सूर्य, पवन और वरुण आदि की स्तुति के लिए सुंदर मंत्र हैं और प्रकृति की सुंदरता का मनोरम वर्णन है किन्तु आधुनिक मानव ने प्रदूषण की मात्रा इतनी बढ़ा दी है कि लगता है कि एक दिन यह सुंदर सलोनी धरती, जिसके बारे में वैज्ञानिक मानते रहे हैं कि असंख्य तारा-मंडलों में केवल हमारी पृथ्वी पर ही जीवन है, वह भी बढ़ते हुए प्रदूषण के कारण, आगामी कुछ ही वर्षों में जीवन-रहित हो सकती है।

(1) इस गद्यांश का उपयुक्त शीर्षक है- **(1)**

(क) कल-कारखानों से हानि   (ख) सुंदर-सलोनी धरती

(ग) पर्यावरण प्रदूषण   (घ) आधुनिक मानव

(2) वायु प्रदूषण क्यों बढ़ रहा है ? **(1)**

(क) कल-कारखानों से निकलने वाले बेशुमार धुएँ के कारण।

(ख) पेड़-पौधों के कारण।

(ग) जनसंख्या-विस्फोट के कारण।

(घ) नदियों के कारण।

(3) निम्नलिखित कथनों पर विचार कीजिए- **(1)**

(1) बड़े-बड़े कारखाने बेशुमार धुआँ उगलते हैं।

(II) कचरों में बहुत सारे जहरीले रसायन होते हैं।

(III) वेदों में भी प्रदूषण के बारे में कुछ कहा गया है।

(IV) हवन से वायुमंडल शुद्ध होता है।

उपर्युक्त कथनों में से कौन-सा कौन-से कथन सही है/हैं ?

(क) केवल (1)   (ख) केवल (II)

(ग) केवल (III)   (घ) (1), (II) और (IV)

(4) वेदों में प्रकृति की सुंदरता का मनोरम वर्णन क्यों किया गया है ? **(2)**

(5) कारखानों से निकलने वाले जहरीले रसायनों को जलाशयों में प्रवाहित करने का क्या परिणाम हुआ ? **(2)**

खंड - ख
(व्यावहारिक व्याकरण)

प्रश्न 3. निम्नलिखित में से किन्हीं दो के उत्तर दीजिए। **(1×2=2)**

    (1) शब्द किनसे बनता है ?
    (2) पद के कितने प्रकार होते हैं ?
    (3) वाक्य में प्रयुक्त शब्द क्या कहलाता है ?

प्रश्न 4. निम्नलिखित में से किन्हीं दो के उत्तर दीजिए। **(1×2=2)**

(1) किस शब्द में अनुस्वार सही लगा है ?

(क) संसार   (ख) ससार

(ग) ससारं   (घ) संसर

(2) किस शब्द में अनुनासिक का सही प्रयोग है ?

(क) संयोग   (ख) भाषाएँ

(ग) कगनाँ   (घ) तिरंगा

(3) अनुस्वार को परिभाषित करें ।

प्रश्न 5. निम्नलिखित में से किन्हीं चार प्रश्नों के उत्तर दीजिए। **(1×4=4)**

(1) किस शब्द में 'प्र' उपसर्ग का प्रयोग नहीं है ?

(क) प्रकार   (ख) प्रमुख

(ग) प्रेम   (घ) प्रचार

(2) 'लुहारिन' में किस प्रत्यय का प्रयोग है ?

(क) रिन   (ख) इन

(ग) लु   (घ) हा

(3) उपसर्ग को उदाहरण सहित परिभाषित करें ।

(4) प्रत्यय को उदाहरण सहित परिभाषित करें ।

(5) 'अनुमानित' में उपसर्ग का प्रयोग हुआ है या प्रत्यय का ?

(क) उपसर्ग   (ख) प्रत्यय

(ग) दोनों   (घ) कोई नहीं

प्रश्न 6. निम्नलिखित में से किन्हीं तीन शब्दों के संधि-विच्छेद कीजिए ।   **(1×3=3)**

   (1) परोपकार   (2) गंगोर्मि

   (3) नायिका   (4) भावुक

प्रश्न 7. निम्नलिखित में से किन्हीं दो के उत्तर दीजिए।   **(1×2=2)**

(1) अरे... यहाँ कौन-सा विराम चिह्न प्रयुक्त होगा ?

(2) तुम कब आए... यहाँ कौन-सा विराम चिह्न प्रयुक्त होगा।

(3) "-"... यह कौन-सा चिह्न है ?

प्रश्न 8. अर्थ के आधार पर निम्नलिखित में से किन्हीं तीन के वाक्य-भेद बताइए।   **(1×3=3)**

(1) मैं पुस्तक पढ़ रहा हूँ।

(2) तुम कब आए ?

(3) तुम चले जाओ।

(4) गोपाल ने भोजन नहीं किया है ।

<div align="center">

खंड- ग

(पाठ्यपुस्तक 'स्पर्श' भाग-1)

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प्रश्न 9. पठित पद्यांश पर आधारित बहुविकल्पीय प्रश्नों के सही उत्तर चुनकर लिखिए।
(1×5=5)

अग्नि पथ। अग्नि पथ! अग्नि पथ!
वृक्ष हों भले खड़े,

हों घने, हों बड़े,
एक पत्र—छाँह भी माँग मत, माँग मत, माँग मत !
अग्नि पथ! अग्नि पथ! अग्नि पथ!
तू न थकेगा कभी!
तू न थमेगा कभी!
तू न मुड़ेगा कभी!—कर शपथ, कर शपथ, कर शपथ!
अग्नि पथ! अग्नि पथ! अग्नि पथ!

(1) इस कविता के रचयिता कौन हैं ?

(क) हरिवंशराय बच्चन

(ख) रामधारी सिंह दिनकर

(ग) अमिताभ बच्चन

(घ) सुमित्रानंदन पंत

(2) कवि किन-किन बाधाओं की संभावना प्रकट कर रहा है ?

(क) वृक्षों के खड़े होने की   (ख) घने होने की

(ग) बड़े होने की   (घ) ये सभी

(3) कवि क्या न माँगने के लिए कह रहा है ?

(क) एक पत्ता छाँह भी   (ख) धन

(ग) सम्मान   (घ) आश्रय

(4) कवि यात्री से क्या शपथ लेने को कहता है ?

(क) कभी न थकने की   (ख) कभी ना रुकने की

(ग) कभी पीछे न मुड़ने की   (घ) उपर्युक्त सभी

(5) 'अग्नि पथ' क्या है ?

(क) कठिनाइयों से भरा मार्ग   (ख) आग वाला रास्ता

(ग) परीक्षा की घड़ी   (घ) अग्नि की चमक

प्रश्न 10. पठित गद्यांश के आधार पर बहुविकल्पीय प्रश्नों के सही उत्तर चुनकर लिखिए। (1x5=5)

इसके अलावा महादेव, देश-विदेश के अग्रगण्य समाचारपत्र, जो आँखों में तेल डालकर गाँधीजी की प्रतिदिन की गतिविधियों को देखा करते थे और उन पर बराबर टीका टिप्पणी करते रहते थे, उनको आड़े हाथों लेने वाले लेख भी समय-समय पर लिखा करते थे। बेजोड़ कॉलम, भरपूर चौकसाई, ऊँचे-से-ऊँचे ब्रिटिश समाचारपत्रों की परंपराओं को अपनाकर चलने का गाँधीजी का आग्रह और कट्टर से कट्टर विरोधियों के साथ भी पूरी-पूरी सत्यनिष्ठा में से उत्पन्न होने वाली विनय विवेक-युक्त विवाद करने की गाँधीजी की तालीम इन सब गुणों ने तीव्र मतभेदों और विरोधी प्रचार के बीच भी देश-विदेश के सारे समाचारपत्रों की दुनिया में और एंग्लो-इंडियन समाचारपत्रों के बीच भी व्यक्तिगत रूप से एम.डी को सबका लाड़ला बना दिया था।

(1) अग्रगण्य समाचारपत्र क्या काम करते थे ?

(क) गाँधीजी की गतिविधियों को देखने का

(ख) उन पर टीका-टिप्पणी करने का

(ग) (क) और (ख) दोनों

(घ) उपर्युक्त में से कोई नहीं

(2) महादेव के लेखक की विशेषताएँ क्या थीं ?

(क) बेजोड़ कॉलम   (ख) भरपूर चौकसी

(ग) (क) – (ख) दोनों   (घ) सामान्य

(3) सत्यनिष्ठा ने एम.डी को किसका लाड़ला बना दिया ?

(क) देश-विदेश के समाचारपत्रों का

(ख) एंग्लो-इंडियन समाचारपत्रों का

(ग) (क) - (ख) दोनों

(घ) भारतीय समाचारपत्रों का

(4) गाँधीजी का क्या आग्रह रहता था ?

(क) कट्टर विरोधियों के साथ भी सत्यनिष्ठा रखो।

(ख) विनय-विवेक-युक्त विवाद करो।

(ग) ब्रिटिश अखबारों की परंपराएँ अपनाओ

(घ) उपर्युक्त सभी।

(5) निम्नलिखित अभिकथन (A) तथा कारण (R) को ध्यानपूर्वक पढ़िए। उसके बाद दिए गए विकल्पों में से सही विकल्प चुनकर लिखिए।

अभिकथन (A) : देश-विदेश के समाचारपत्र गाँधीजी की प्रतिदिन की गतिविधियों को देखा करते थे और उन पर बराबर टीका-टिप्पणी करते रहते थे।

कारण (R): गाँधीजी ऊँची से ऊँची ब्रिटिश समाचारपत्रों की परंपराओं को अपना कर चलने को कहते थे।

(क) अभिकथन (A) तथा कारण (R) दोनों गलत हैं।

(ख) अभिकथन (A) गलत है लेकिन कारण (R) सही है।

(ग) अभिकथन (A) सही है लेकिन कारण (R) उसकी सही व्याख्या नहीं करता है।

(घ) अभिकथन (A) तथा कारण (R) दोनों सही हैं तथा कारण (R) अभिकथन (A) सही व्याख्या करता है।

प्रश्न 11. निर्धारित पाठों के आधार पर चार में से किन्हीं तीन प्रश्नों के उत्तर दीजिए।
(2×3=6)

क) बुढ़िया के लड़के की मृत्यु कैसे हुई तथा बुढ़िया लड़के की मृत्यु के दूसरे दिन ही खरबूज़े बेचने क्यों चल पड़ी — पाठ के आधार पर लिखें।

ख) एवरेस्ट पर चढ़ने के लिए कुल कितने कैंप बनाए गए ? उनका वर्णन कीजिए।

ग) 'अतिथि सदैव देवता नहीं होता, वह मानव में थोड़े अंशों में राक्षस भी हो सकता है'— इस कथन का आशय स्पष्ट कीजिए।

घ) चंद्रशेखर रामन् के व्यक्तित्व की दो विशेषताओं का उल्लेख कीजिए।

प्रश्न 12. निर्धारित कविताओं के आधार पर चार में से किन्हीं तीन प्रश्नों के उत्तर दीजिए।
(2×3=6)

क) रहीम के अनुसार प्रेम का धागा टूटने पर पहले की भाँति क्यों नहीं हो पाता — पाठ के आधार पर स्पष्ट कीजिए।

ख) 'गीत-अगीत' कविता का प्रतिपाद्य लिखिए।

ग) 'खुशबू रचते हैं हाथ' कविता के द्वारा कवि उच्च- वर्ग को उनके किस कर्तव्य की याद दिलाना चाहता है ?

घ) रैदास अपने पदों द्वारा हमें क्या संदेश देना चाहते हैं ?

प्रश्न 13. निर्धारित पूरक पाठ्यपुस्तक से दिए गए तीन प्रश्नों में से दो प्रश्नों के उत्तर लगभग 80 शब्दों में लिखिए ।   (4×2=8)

क) 'गिल्लू' पाठ के आधार पर बताइए कि कौए को एक साथ समादरित और अनादरित प्राणी क्यों कहा गया है ?

ख) 'मेरा छोट-सा निजी पुस्तकालय' पाठ से पुस्तक प्रेम और पुस्तकों से प्राप्त संस्कारों संबंधी किन जीवन मूल्यों की प्रेरणा मिलती है ? सोदाहरण लिखिए।

ग) 'कल्लू कुम्हार की उनाकोटी' पाठ के संदर्भ में उनाकोटी स्थित गंगावतरण की कहानी को अपने शब्दों में लिखिए।

<center>

खंड – घ
(रचनात्मक लेखन)

</center>

प्रश्न 14. दिए गए संकेत-बिंदुओं के आधार पर तीन विषयों में से किसी एक विषय पर लगभग 100 शब्दों में अनुच्छेद लिखिए।   (5)

(क) पुस्तक मेला

• प्रमुख आकर्षण   • लाभ   • मेरी प्रिय पुस्तकें

(ख) समय का सदुपयोग

• समय की महत्ता   • कुछ उदाहरण

• आत्मविश्वास की जननी   • हमारा कर्तव्य

(ग) प्रदूषण की समस्या

• समस्या का स्वरूप   • प्रदूषण के कारण

• प्रदूषण का दुष्प्रभाव   • प्रदूषण रोकने के उपाय

प्रश्न 15. आप नवमी कक्षा के छात्र विनय/विनीता है और छात्रावास में रहते/रहतीं हैं। अपने मित्र को छात्रावास में रहने का अनुभव बताते हुए एक पत्र लिखिए।   (5)

<center>

अथवा

</center>

विवाह-बंधन में शीघ्र बँधने वाले अपने मित्र के बड़े भाई को शुभकामनाएँ देते हुए पत्र लिखिए।

प्रश्न 16. नीचे दिए गए चित्र का वर्णन अपने शब्दों में कीजिए।   **(5)**
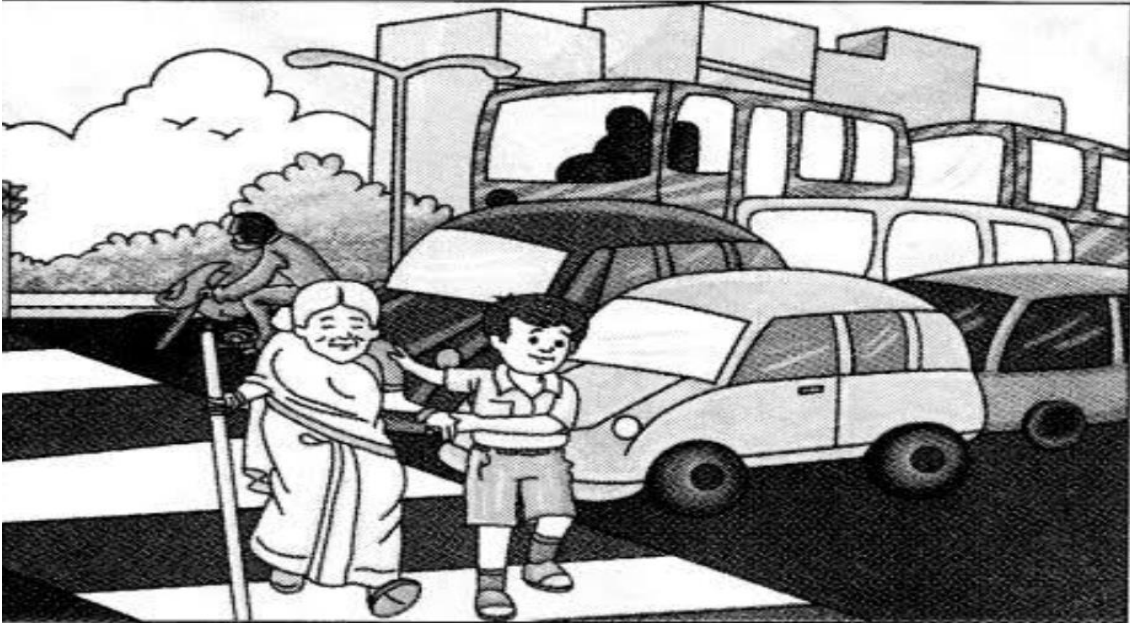
प्रश्न 17. किसी एक परिस्थिति पर लगभग 100 शब्दों में संवाद लिखिए।   **(5)**

दादी और पोती के बीच महिलाओं की शिक्षा और उनके कामकाजी होने के विषय में विचारों को संवाद शैली में लिखिए।

अथवा

दो छात्रों के बीच प्रतियोगी परीक्षाओं के विषय में की गई चर्चा को संवाद के रूप में लिखिए।

MATHEMATICS

TIME - 3HOURS
M.M-80

I. GENERAL INSTRUCTION

- All questions are compulsory.
- This question paper consists of 38 questions divided into five sections –A,B,C,D and E.
- Section A contain 20 questions of 1 mark each.
- Section B contain 5 questions of 2 marks each.
- Section C contain 6 questions of 3 marks each.
- Section D contains 4 questions of 5 marks each.
- Section E contains 3 questions of 4 marks each.

SECTION- A

1. 'Lines are parallel if they do not intersect 'is stated in the form of
   a) an axiom   b) a definition   c) a postulate   d) a proof

2. How many linear equations in x and y can be satisfied by x=1 and y=2 ?
   a) Only one   b) two   c) Infinitely many   d) Three

3. The number of dimensions, a solid has
   a) 2   b) 1   c) 3   d)none se

4. The ordinate of the point (4,-5) is
   a) 4   b) 5   c) -5   d) None of these

5. In which quadrilateral diagonals are perpendicular
   a) Trapezium   b) Parallelogram   c) Rhombus   d) none of these

6. The sides of triangle is 16cm,30cm,34cm. Its area is
   a) 240 cm^2 b) 280cm^2 c) 220 cm^2 d) 250 cm

7. If the volume and the surface area of sphere are numerically the same then its radius is
   a) 1 units   b) 2 units   c) 3 units   d) 4 units

8. Three angles of quadrilateral are 75^0 .90^0 ,75^0 .Find the fourth angle
   a) 120^0 b) 125^0 c) 140 ^{0} d)none of these

9. The radius of sphere is 2r , then its surface area will be
   a) 16πr^2 b) 8 πr^2 c) 4πr^2 d)none of these

10. If ABCD is a rhombus such that $\angle ACB$=40^0 then $\angle ADB$ is
    a) 50^0 b) 45^0 c) 60^0 d) 30^0

11. In how many parts a plane can divide a circle if it intersect perpendicularly ?
    a) 2 parts   b) 3 parts   c) 4 parts   d) 8 parts

12. If one angle of a triangle is equal to the sum of the other two angles then the triangle is

    a) an isosceles triangle   b) an obtuse triangle

    c) an equilateral triangle   d) a right triangle

13. Chords equidistant from the centre of a circle are equal in length is

    (a) True   (b) false   (c) both are correct   d) none of these

14. In a parallelogram ABCD, If $\angle A = 75^0$ find $\angle C$

    a)90^0 b)120^0 c) 75^0 d) None of these

15. In a circle of radius 5 cm ,Find the length of a chord which is at a distance of 4cm from the centre of the circle

    a) 8 cm   b) 6 cm   c) 15 cm   d) 9 cm

16. If the surface area of a sphere is 154 cm^2 .find the radius

    a) 3.5 cm   b) 4 cm   c) 7 cm   d) none of the these

17.If slant height of a cone is 17 cm and the base radius is 8 cm ,then the height of cone is

    a) 16 cm   b) 12 cm   c) 15 cm   d) 18 cm

18 .If a ray stands on a line then the sun of two adjacent angles so formed is

    a) 80^0 b) 180^0 c) 120^0 d) none of these

Directions for questions 19 and 20 : In question numbers 19 and 20 , a statement of

Assertion (A) is followed by a statement of Reason(R) chose the correct option

The following questions consists of two statements- Assertion (A) and Reason(R)

   Answer these questions selecting the appropriate option given below:

   a) Both A and R are true and R is the correct explanation for A.

   b) Both A and R are true and R is not the correct explanation for A.

   c) A is true but R is false.

   d) A is false but R is true

19. Assertion(A): In a parallelogram. ABCD , $\angle A = 90^0$,then ABCD is a rectangle

    Reason(R): Every parallelogram is rectangle

20. Assertion(A): There can be infinite number of lines that can be drawn through a single point

   Reason(R): Through two distinct points there can be only one line drawn

SECTION-B

21. If x = 3 and y = 2 is a solution of the equation 2x+ 3y = k, then find the value of k .

22. Prove that Angles in the same segment of a circle are equal.

23. Find the point which lies on the line y = 2x - 3 having abscissa 3.

24.The diameter of a right circular cone is 8cm and its volume is $48\pi cm^3$. What is its height ?

OR

   Find the surface area of sphere with radius 7cm.

25. If a point lies between two points A and B such that AC=BC, then prove that

$AC=\frac{1}{2}AB$. Explain by drawing the figure.

OR

Solve the equation x-3=7 and state the axiom that you use here.

SECTION-C

26. Sides of a triangle are in ratio of 12:17:25 and its perimeter is 540 cm .Find its area.

27.The measure of an angle is 5 times its compliment then the angle measure is?

28. Show that $0.\overline{45}$ can be expressed in the form of $\frac{P}{q}$ where p and q are integers and q $\neq$0

OR

Locate $\sqrt{9.3}$ on a number line.

29. ABCD is a quadrilateral in which AD=BC and $\angle DAB = \angle CBA$,then prove that
   (i) $\Delta ABD \cong \Delta BAC$ (ii) BD=AC   (iii) $\angle ABD = \angle BAC$

30.Draw a histogram for the following data :

Life time (hrs)	100 - 200	200 - 300	300 –400	400 - 500	500 -600
No of lamps	10	20	16	8	12

31.If x+y+z=0, show that $x^2+y^2+z^3 = 3xyz$.

OR

Factorise- $x^3- 2x^2-x +5$

SECTION-D

32. Three girls Reshma, Salma and Mandeep are playing a game by standing on a circle of radius 5 cm drawn in a park . Reshma throws a ball to Salma ,Salma to Mandeep ,Mandeep to Reshma. If the distance between Reshma and Salma and between Salma and Mandeep is 6 cm each. What is the the distance between Reshma and Mandeep.

33. The diameter of the moon is approximately one fourth of the diameter of the earth. Find the ratio of their surface areas

OR

A hemispherical bowl is made of steel,0.25 cm thick. The inner radius of bowl is 5 cm .find the outer curved surface area of bowl.

34. State and prove the mid point theorem

OR

ABCD is a rectangle in which diagonal AC bisects $\angle A$ as well as $\angle C$ .Show that
   (i) ABCD is a square   (ii) diagonal BD bisects $\angle B$ as well as $\angle D$

35. (a) Write any three Euclid's postulates OR Axioms
    (b) Prove that an equilateral triangle can be constructed on any given line segment

SECTION-E

CASE STUDY QUESTIONS.   (1+1+2)

36. Traffic cones are used outdoor road work in various situation such as traffic redirection advanced warning of hazards or the prevention of traffic .Raghav saw a cone and tries to make it. Raghav's cone has radius 7 cm and height 24 cm
   (I) Find the slant height of cone
   (ii) Find the curved surface area of cone
   (iii) Find the cost of 20 such cones if a cone is made at an expense of Rs.4/ cm^2
   OR
      Find the volume of cone

37.A circular park of radius 20 cm is situated in a colony .Three boys Ankur ,Bhaskar and Chirag are sitting at equal distance on its boundary each having a toy telephone in his hands to talk each other
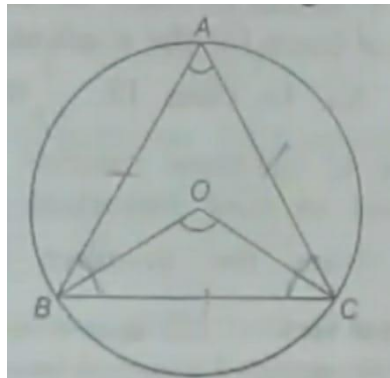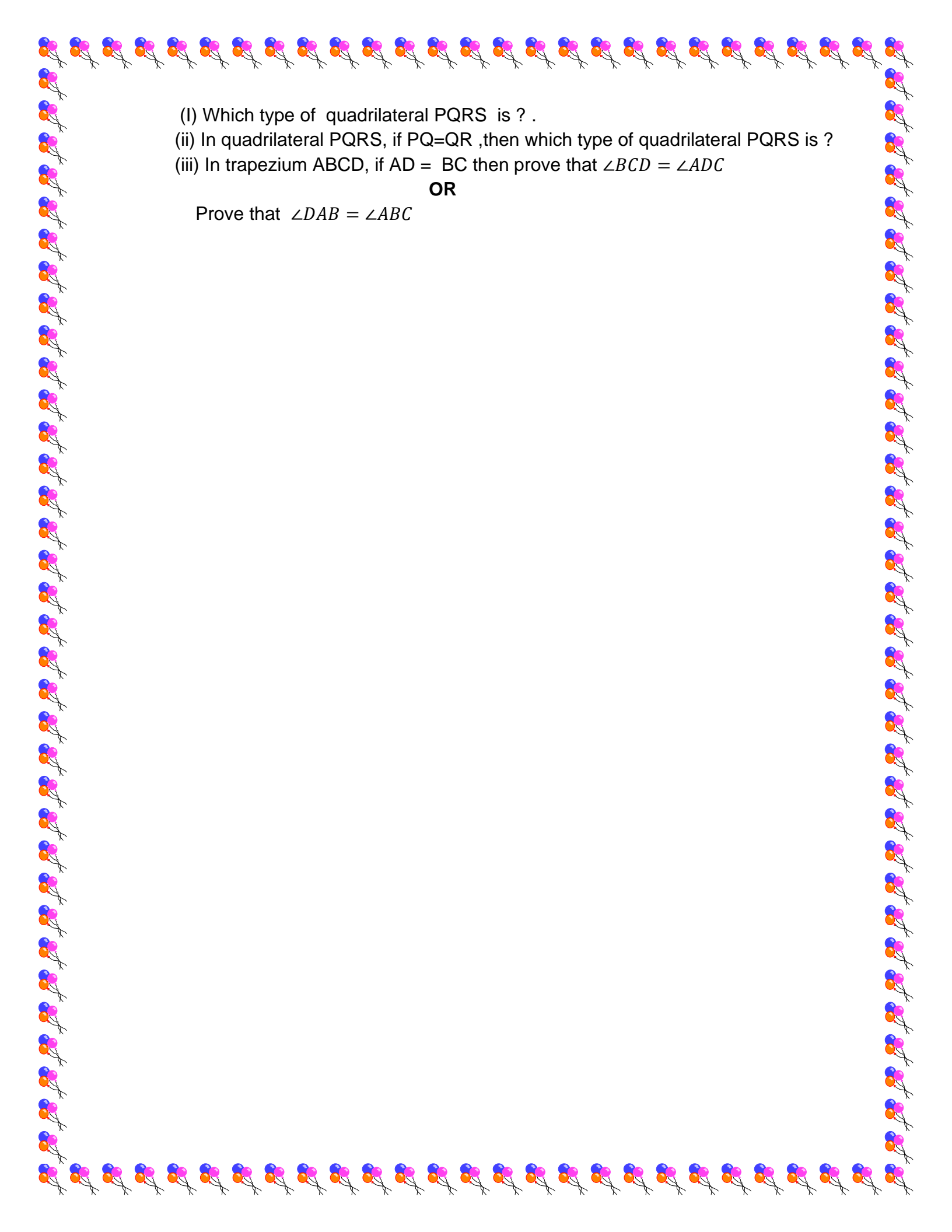

   (i) which type of triangle ABC in the figure.
   (ii) Measure of $\angle BAC$ is
   (iii) Measure of $\angle BOC + \angle OCB$ is   **OR**   Measure of $\angle ABC + \angle BAC$ is

38. Eiffel tower in Paris is an architectural wonder of the world .It uses an arrangement of criss crossing X shaped beams known as truss.
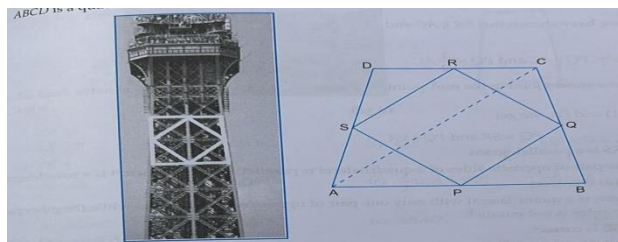
ABCD is a trapezium in which AB ∥ DC,P,Q,R and S are the mid points of AB BC,CD and DA respectively
Refer the following geometric description answer the following questions:

(I) Which type of quadrilateral PQRS is ? .

(ii) In quadrilateral PQRS, if PQ=QR ,then which type of quadrilateral PQRS is ?

(iii) In trapezium ABCD, if AD = BC then prove that $\angle BCD = \angle ADC$

OR

Prove that $\angle DAB = \angle ABC$

SOCIAL SCIENCE

Time: 3hrs   M.M.:80

General Instructions:

a) The question paper comprises Six Sections – A, B, C, D, E and F. There are 37 questions in the question paper. All questions are compulsory.
b) Section A – From questions 1 to 20 are MCQs of 1 mark each.
c) Section B – Question no. 21 to 24 are Very Short Answer Type Questions, carrying 2 marks each. Answer to each question should not exceed 40 words.
d) Section C – Question no. 25 to 29 are Short Answer Type Questions, carrying 3 marks each. Answer to each question should not exceed 60 words.
e) Section D – Question no. 30 to 33 are long answer type questions, carrying 5 marks each. Answer to each question should not exceed 120 words.

f) Section E - Question no. from 34 to 36 are case based questions with three sub questions and are of 4 marks each. Answer to each question should not exceed 100 words.

g) Section F – Question no. 37 is map-based, carrying 5 marks with two parts, 37a from History (2 marks) and 37b from Geography (3 marks).

h) There is no overall choice in the question paper. However, an internal choice has been provided in a few questions. Only one of the choices in such questions have to be attempted.

H/C Q.no: 7,8,10,11,13,14,17,18,19,20,21,22,27,29,31,32,34,36,37(a).

SECTION A
MULTIPLE CHOICE QUESTIONS

1. Which one of the following is not a Himalayan range? (1)

(a)   Himadri   (c)Kullu
(b)   Himachal   (d) ShivaliK

2. Which physical feature lies close to the equator and experiences equatorial climate? (1)

(a)   The Coastal Plains   (c)The Peninsular plateau
(b)   The Islands   (d)The Indian Deser

3. Population becomes _____ capital when there is investment made in the form of education, training and medical care.   (1)

(a)   Working   (c)Labour
(b)   Fixed   (d)Human

Match the column A with the column B.

COULMN A	COLUMN B
(1) Drainage	(a) Headwaters of the Ganga
(2) Drainage basin	(b) Area drained by a single river system
(3) Bhagirathi	(c) River system of an area
(4) Sambhar lake	(d) Salt water lake

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

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

5. The accepted average calorie requirement per person in urban areas in India is _____.

(a)   2200 calories   (c)2300 calories
(b)   2000 calories   (d)2100calories

6. The following question consist of two statements — Assertion (A) and Reason (R). Answer the question by selecting the most appropriate option given below: (1)

Assertion: The poverty line is determined on the basis of calorie requirements.

Reason: The poverty line is the minimum income required to meet the basic needs of an individual, which includes food, clothing, and shelter.

(a)   Both A and R are true and R is the correct explanation of A.
(b)   Both A and R are true but R is not the correct explanation of A.
(c)   A is correct but R is wrong.
(d)   A is wrong but R is correct.

7. The term 'Old Regime' is usually used to describe_____. (1)

(a) France before 1000 B.C.   (c) Society of France after 1789 A.D.

(b) Society and institutions of France before   (d) None of the above
   1789

8. How does a 'Subsistence Crisis' happen?

(a) Bad harvest leads to scarcity of grains

(b) Food prices rise and the poorest cannot buy bread

(c) Leads to weaker bodies, diseases, deaths and even food riots

(d) All the above

9. Which of the following is not a component of food security?

(a)   Availability   (c)Accessibility
(b)   Affordability   (d)   Sustainability

10. The leader of the Bolshevik party was_____.
(a) Stalin   (c) Karl Marx
(b) Lenin   (d) Louis Blanc

11. Name the country, which helped Germany during the crisis of hyper inflation.

(a) Austria -Hungry   (d) Italy

(b) Japan

(c) USA

12. Which organization is responsible for maintaining buffer stock of food grains in India?
(a)   Food Corporation of India (FCI)   (c) National Food Security Act (NFSA)
(b)   World Trade Organization (WTO)   (d) Indian Council Agricultural Research

13. The minimum age required for being a voter is:
(a) 25 years   (c) 18 years
(b) 21 years   (d) 15 years

14. In India, elections for which of these bodies are held after every five years?
(a) Rajya Sabha   (c) Vidhan Parishad
(b) Lok Sabha and Vidhan Sabha   (d) Only Lok Sabha

15. Amul is a cooperative established in _____.
(1)
(a)   Punjab   (c) Gujarat
(b)   Haryana   (d)   Kerala

16. Which of the following statements is true about the population of a country?
(a)   More population always leads to economic development.
(b)   Population growth is always a burden on the economy.
(c)   Population can be an asset if provided with proper education and skills.
(d)   Population has no impact on economic growth.

17. Free and fair elections are ensured by the _____.

18. An introductory statement in a constitution which states the reasons and guiding
    values of the constitution is _____.

19. Define democracy.

20. When did the French Revolution occur?

SECTION B

VERY SHORT ANSWER QUESTIONS

21. Explain Bloody Sunday.

22. What is a Constitution?

23. Explain the features of the cold weather season.

24. What is the difference between economic activities and non-economic activities?

SECTION C

SHORT ANSWER QUESTIONS

25. Describe with examples how distance from the sea influences the climate of a place.

26. What are the main causes of poverty in India?

27. Explain the three Estates of French society.

28. Explain, how different states have succeeded in reducing poverty.

29. What do you mean by secularism and sovereignty?

SECTION D
LONG ANSWER QUESTIONS

30. What are the problems of the functioning of ration shops?

Or

Why there should be food security?

31. Discuss the peculiar features of Nazism.

Or

Write a short note on Hitler.

32. What are the merits of democracy?

Or

What is Constitution? Why do we need Constitution?

33. Discuss the major components of population growth.

Or

Why in India most migrations have been from rural to urban areas? What are its effects?

SECTION E
CASE BASED QUESTIONS

34. Read the source given below and answer the questions that follow: (1×4=4)

In 1774 Louis XVI of the Bourbon family of Kings at ascended the Throne of France. He was 20 years old and married to the Austrian princess Marie Antoinette upon his accession the new king found as empty treasury. Long years of War had drained the financial resources of France. Added to this was the cost of maintaining the extravagant court at the immense place of Versailles. Under Louis XVI France helped the 13 American colonies to gain their Independence from the common enemy, Britain. The war added more than a billion Livres to a debt that had already already risen to more

than 2 billion livres. Lenders, who gave the State credit, now begin to charge 10% interest on loan. So the France government was obliged to spend the increasing percentage of its budget on interest payments alone. To meet the regular expenses, such as the cost of maintaining an army, the court, running government offices or universities, the state was forced to increase taxes. Yet even this measure would not have sufficient. French society in the eighteenth century was divided into three estates, and only members of the third estate paid taxes.

1. Who was the King of France at the time of the Revolution?

(a) Louis XIV   (c) Marie Antoinette

(b) Louis XVI   (d) Nicholas II

2. How much interest was charged by the lenders from the France government?

(a)   10%   (c)15%
(b)   12%   (d)   18%

3. The word livres stands for:

(a) Unit of currency in France   (c) Tax to be paid directly to the state

(b) Tax levied by the Church   (d) None of these

4. Write the name of the common enemy of France and American colonies?

(a)   Germany   (c)Austria
(b)   Britain   (d)   Russia
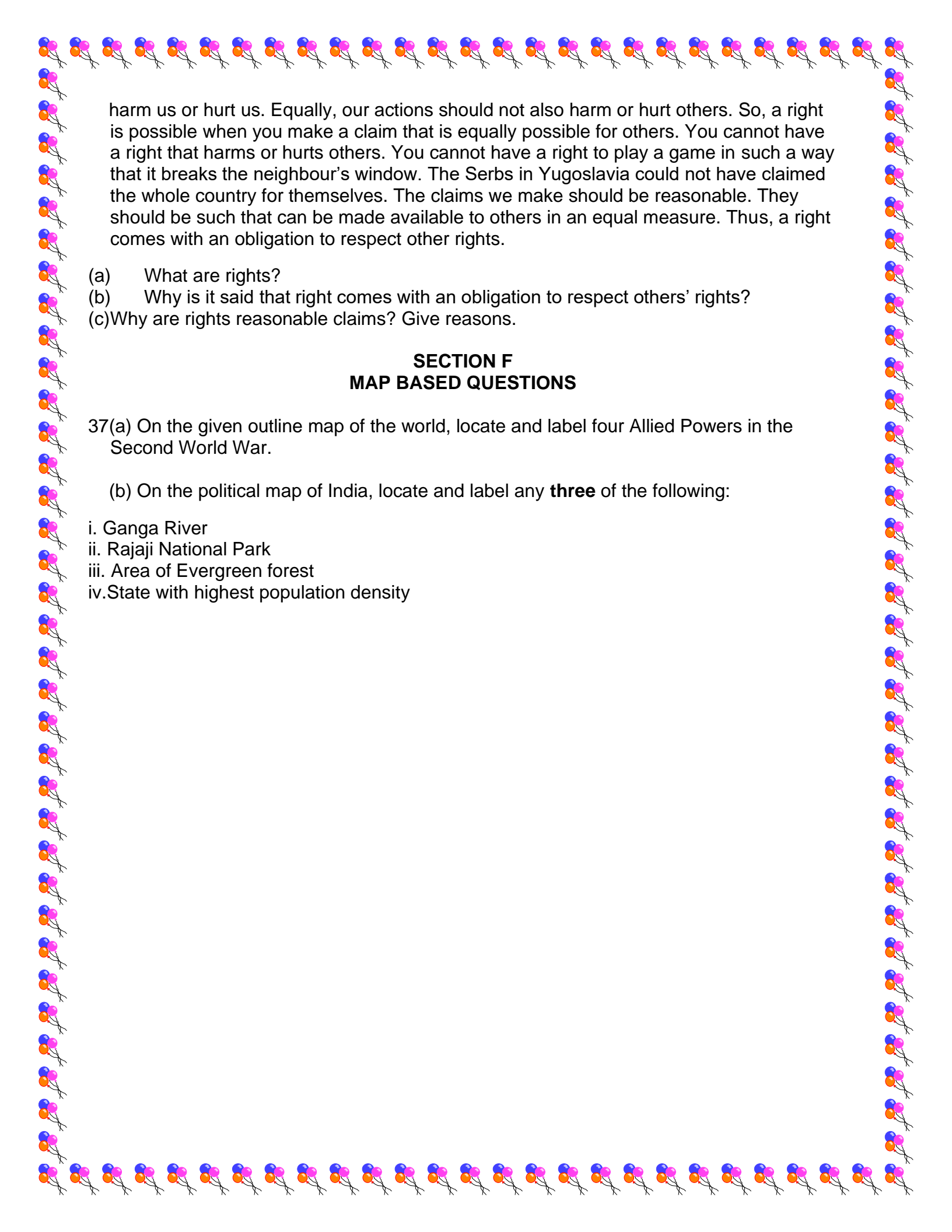
35. Read the source given below and answer the questions that follow: (1×4=4)

The headwaters of the Ganga, called the 'Bhagirathi' is fed by the Gangotri Glacier and joined by the Alaknanda at Devaprayag in Uttarakhand. At Haridwar the Ganga emerges from the mountains on to the plains. The Ganga is joined by many tributaries from the Himalayas, a few of them being major rivers such as the Yamuna, the Ghaghara, the Gandak and the Kosi. The river Yamuna rises from the Yamunotri Glacier in the Himalayas. It flows parallel to the Ganga and as a right bank tributary, meets the Ganga at Allahabad. The Ghaghara, the Gandak and the Kosi rise in the Nepal Himalaya. They are the rivers, which flood parts of the northern plains every year, causing widespread damage to life and property but enriching the soil for the extensive agricultural lands. The main tributaries, which come from the peninsular uplands, are the Chambal, the Betwa and the Son. These rise from semi arid areas, have shorter courses and do not carry much water in them.

(a)   Which is the head water of the Ganga?
(b)   Name any two tributaries of the river Ganga.
(c)   Which tributaries come from the peninsular uplands?
(d)   The river Yamuna rises from the _____.

36. Read the following passage and answer the questions that follow:
(1+1+2=4)

Rights are claims of a person over other fellow beings, over the society and over the government. All of us want to live happily, without fear and without being subjected to degraded treatment. For this, we expect others to behave in such a way that does not

harm us or hurt us. Equally, our actions should not also harm or hurt others. So, a right is possible when you make a claim that is equally possible for others. You cannot have a right that harms or hurts others. You cannot have a right to play a game in such a way that it breaks the neighbour's window. The Serbs in Yugoslavia could not have claimed the whole country for themselves. The claims we make should be reasonable. They should be such that can be made available to others in an equal measure. Thus, a right comes with an obligation to respect other rights.

(a)   What are rights?
(b)   Why is it said that right comes with an obligation to respect others' rights?
(c)Why are rights reasonable claims? Give reasons.

SECTION F
MAP BASED QUESTIONS

37(a) On the given outline map of the world, locate and label four Allied Powers in the Second World War.

   (b) On the political map of India, locate and label any **three** of the following:

i. Ganga River
ii. Rajaji National Park
iii. Area of Evergreen forest
iv.State with highest population density

SCIENCE

General Instructions:

i. This question paper consists of 39 questions in 5 sections.

ii. All questions are compulsory. However, an internal choice is provided in some questions. A student is expected to attempt only one of these questions.

iii. Section A consists of 20 objective type questions carrying 1 mark each.

iv. Section B consists of 6 Very Short questions carrying 02 marks each. Answers to these questions should be in the range of 30 to 50 words.

v. Section C consists of 7 Short Answer type questions carrying 03 marks each. Answers to these questions should be in the range of 50 to 80 words.

vi. Section D consists of 3 Long Answer type questions carrying 05 marks each. Answer to these questions should be in the range of 80 to 120 words.

vii. Section E consists of 3 source-based/case-based units of assessment of 04 marks each with sub-parts.

Section-A

Select and write the most appropriate option out of the four options given for each of the questions 1 - 20. There is no negative mark for incorrect response.

Q1. Seema visited a Natural Gas Compressing Unit and found that the gas can be liquefied under specific conditions of temperature and pressure. While sharing her experience with friends she got confused. Help her to identify the correct set of conditions

(a) Low temperature, low pressure

(b) High temperature, low pressure

(c) Low temperature, high pressure

(d) High temperature, high pressure

Q2. Neutron was discovered by

(a) James Chadwick

(b) Neils Bohr

(c) E. Goldstein

(d) J.J. Thomson

Q3. A few substances are arranged in the increasing order of 'forces of attraction' between their particles. Which one of the following represents a correct arrangement?

(a) Water, air, wind

(b) Air, sugar, oil

(c) Oxygen, water, sugar

(d) Salt, juice, air

Q4. The boiling points of diethyl ether, acetone and n-butyl alcohol are 35°C, 56°C and 118°C respectively. Which one of the following correctly represents their boiling points in kelvin scale?

(a) 306 K, 329 K, 391 K

(b) 308 K, 329 K, 392 K

(c) 308 K, 329 K, 391 K

(d) 329 K, 392 K, 308 K

Q5. Atomicity of phosphorous molecule is
(a) 3
(b) 6
(c) 4
(d) 1
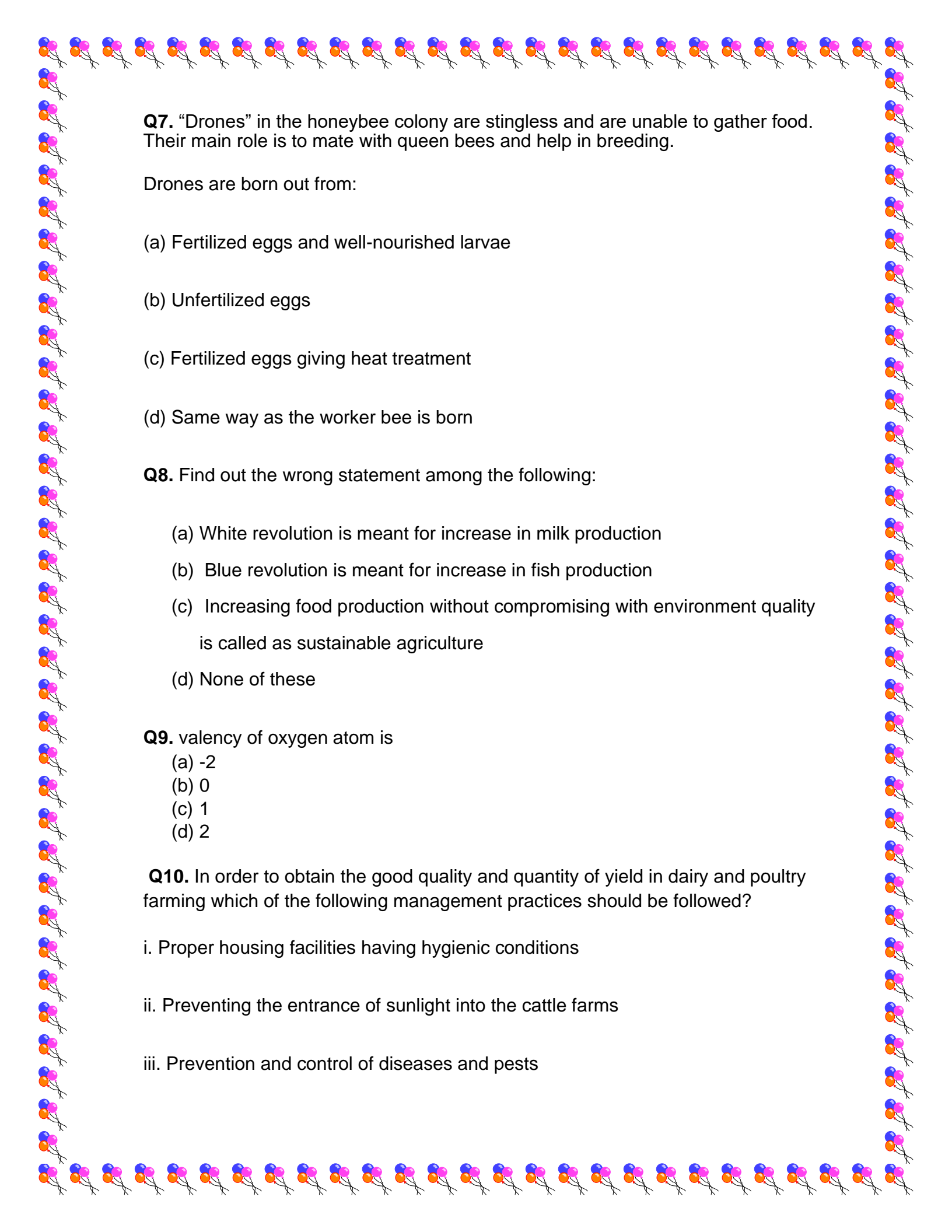
Q6. The National Dairy Development Board (NDDB) designed and implemented the world's largest dairy development programme, called "Operation Flood", which came out to be the reason behind White Revolution in India. Can you name the man who is known as the Father of White Revolution?   (1)
    (a) Dr. G Nammalvar
    (b) Abdul Rashid
    (c) Dr. Jagadish Chandra Bose
    (d) Dr. V. Kurien

Q7. "Drones" in the honeybee colony are stingless and are unable to gather food. Their main role is to mate with queen bees and help in breeding.

Drones are born out from:

(a) Fertilized eggs and well-nourished larvae

(b) Unfertilized eggs

(c) Fertilized eggs giving heat treatment

(d) Same way as the worker bee is born

Q8. Find out the wrong statement among the following:

(a) White revolution is meant for increase in milk production

(b) Blue revolution is meant for increase in fish production

(c) Increasing food production without compromising with environment quality
     is called as sustainable agriculture

(d) None of these

Q9. valency of oxygen atom is
(a) -2
(b) 0
(c) 1
(d) 2

 Q10. In order to obtain the good quality and quantity of yield in dairy and poultry farming which of the following management practices should be followed?

i. Proper housing facilities having hygienic conditions

ii. Preventing the entrance of sunlight into the cattle farms

iii. Prevention and control of diseases and pests

iv.Maintenance of proper temperature

(a) (i) and (iii)

(b) (i), (ii) and (iii)

(c) (i), (iii) and (iv)

(d) All of the above

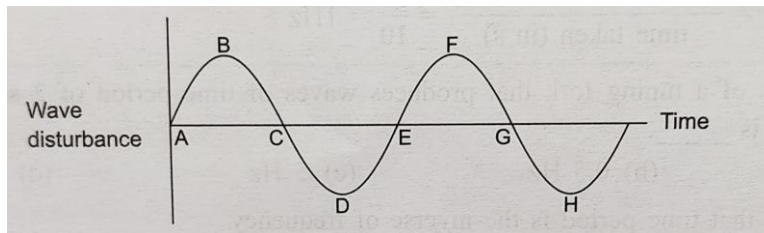**Q11-**   The SI unit of universal gravitational constant, G is

(a $N\,m^{-2}\,kg^{-2}$

(b) $N\,m^2\,kg^2$

(c) $N\,m^2\,kg^{-2}$

(d) $N\,m\,kg^{-2}$

Q12. The image below shows a sound wave.

Which of the following distance correctly represents the wavelength of the wave?

(a) AB

(b) AC

(c) BD

(d) BF

Q13. Which of the following statements marks a difference between plant cell and animal cell?

(a) Plant cells have cell walls which animal cells do not.

(b) Plant cells do not have vacuole while animal cells do have.

(c) Plant cells have only cell membrane while animal cells have both cell wall as well as cell membrane.

(d) Plant cells have more plastids while animal cells have few plastids.

Q14. The nucleus controls all the activities of the cell and acts as a site of DNA material and protein synthesis. It is composed of some components which all together give the nucleus its functionality. Here is shown a figure of the nucleus with some of its
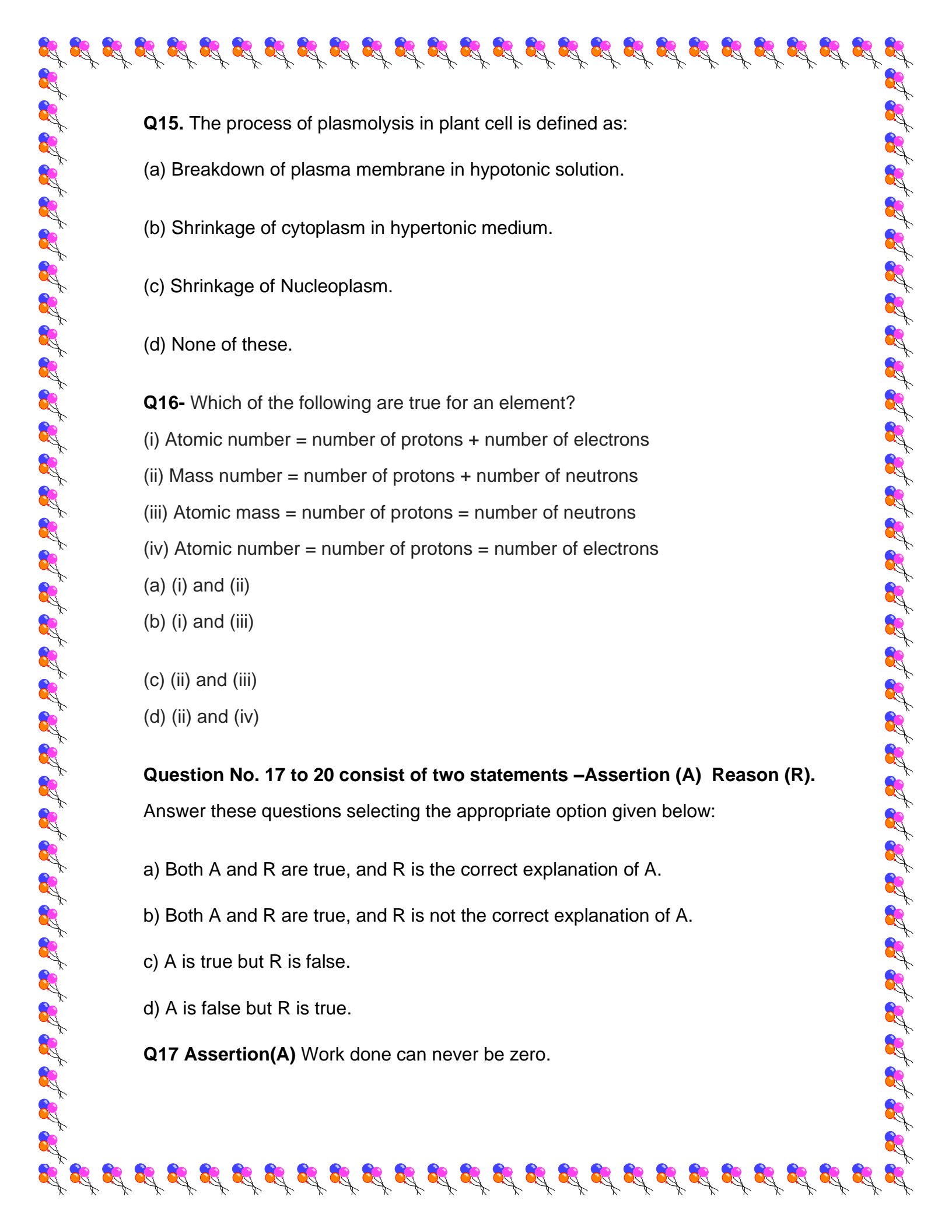
components labelled as A, B, C and D. Can you name these components correctly?   (1)
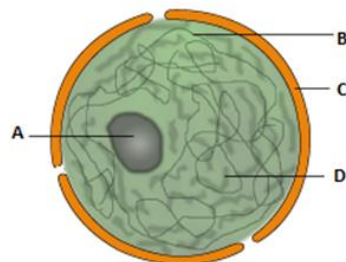
Structure of Nucleus

(a) A – Nucleons; B – Chromatin; C – Nuclear membrane; D – Nucleoplasm

(b) A – Nucleus; B – Chromatin; C – Nuclear membrane; D – Nucleoplasm

(c) A – Nucleolus; B – Chromatin; C – Nuclear membrane; D – Nucleoplasm

(d) A – Nucleolus; B – Chromatin; C – Nuclear membrane; D – Nuclear wall

Q15. The process of plasmolysis in plant cell is defined as:

(a) Breakdown of plasma membrane in hypotonic solution.

(b) Shrinkage of cytoplasm in hypertonic medium.

(c) Shrinkage of Nucleoplasm.

(d) None of these.

Q16- Which of the following are true for an element?

(i) Atomic number = number of protons + number of electrons

(ii) Mass number = number of protons + number of neutrons

(iii) Atomic mass = number of protons = number of neutrons

(iv) Atomic number = number of protons = number of electrons

(a) (i) and (ii)

(b) (i) and (iii)

(c) (ii) and (iii)

(d) (ii) and (iv)

Question No. 17 to 20 consist of two statements –Assertion (A) Reason (R).

Answer these questions selecting the appropriate option given below:

a) Both A and R are true, and R is the correct explanation of A.

b) Both A and R are true, and R is not the correct explanation of A.

c) A is true but R is false.

d) A is false but R is true.

Q17 Assertion(A) Work done can never be zero.

Reason(R) Work done by a constant force is equal to the product of force and the displacement of the object in the direction of force.

Q18. Assertion(A) Our natural resources are damaged due to human activities**.**

Reason(R) Due to the revolution natural resources are getting used more intensively

Q19. Assertion(A) Wheat is a rabi crop

Reason(R) Wheat is completely grown in the month of November to April.

Q20- Assertion(A) : Isobars have equal mass number and different atomic number.

Reason(R): Isobars possess different chemical properties.

SECTION B

Question No. 21 to 26 are very short answer questions

Q21. How many nutrients are

(a) essential for plant growth ?

(b) obtained from soil ?

(c) called major or macro.

(d) called minor or micro.

Q22. A sound wave travels at a speed of 339 m/s .If its wavelength is 1.5 cm ,what is the frequency of the wave ? Will it be audible?

Q23- How does the water kept in an earthen pot (matka) become cool during summer?

Q24. Differentiate between Kharif and Rabi crops? (Any two differences)

Q25. State Archimedes' principle. Also write it's two applications.

Q26. What do you understand by
1. Note
2. Timbre or Quality

SECTION C

Question No. 27 to 33 are short answer questions

Q27. (a) On what factors does the kinetic energy possessed by a body depend ?

(b) With what velocity should a student of mass 60 kg run so that his kinetic energy becomes 270 J ?

Q28. Waves of higher frequencies are used for cleaning hard to reach places such as spiral tubes ,odd -shaped parts and electronic components. They find extensive applications in industries and medical fields.

(i) Name the type of waves.

(ii) Mention the frequency of these waves.

(iii) Write another important use of this wave.

Q29. Answer the following:
(i)   Give one example each of milch and draught animals.
(ii)   Name one indigenous and one exotic breed of cow.
(iii)   Name one nitrogen fixing bacteria.

Q30. A boy raises a load of 0.4 kg, at a constant speed, through a vertical distance of 1.5m. If the power developed by the boy in raising the load is 3W, then calculate the time taken. (Take acceleration due to gravity as 10 m/s^2)
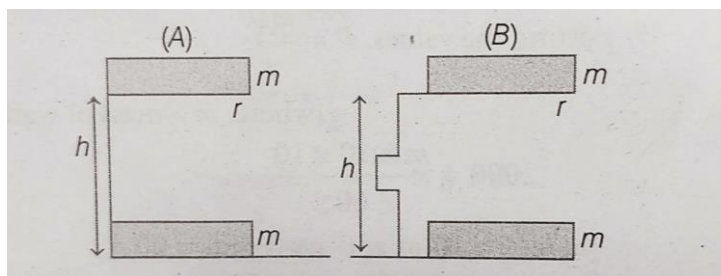
OR

(i) What is meant by potential energy of a body?

(ii) A body of mass m is raised to a vertical height h through two different paths A and B. What will be the potential energy of the body in the two cases? Give reason for your answer.

Q31- Explain the following term:
    (a) Sublimation
    (b) Latent heat of fusion
                        (c) Evaporation
OR

    Explain the following terms with suitable example:

        (a) Polyatomic ion
        (b) Valency
        (c) Isotopes

Q32. What is the main function of each
    a) plasma membrane
    b) mitochondria
    c) lysosomes

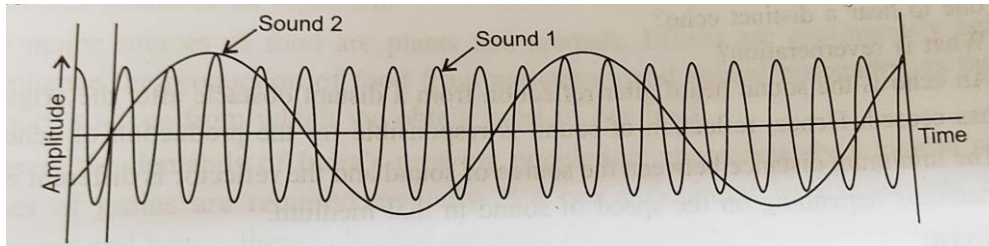**Q33-** Explain Rutherford's model and its drawbacks ?

OR

    Explain Bohr-Bury scheme and write sub-atomic particles of atom?

SECTION D

Question No. 34 to 36 are long answer questions

Q34. The image below shows two sound waves. Carefully observe the image and answer the following question

(a) Define amplitude.

(b) What can be said about the amplitudes of both the sound waves?

(c) Define frequency. Also, identify which wave has greater frequency.

(d) Which characteristic of sound depends on the frequency of the wave.

OR

A person standing in front of a vertical cliff fires a gun and hears its echo in 4 s. The speed of sound in air is 340 m/s.

(a) Which phenomena is responsible for the production of echo?

(b) Calculate the distance at which the person is standing from the cliff.

(c) What should be the minimum time interval between the original sound and the reflected one to hear a distinct echo?

(d) What is reverberation?

Q35. (a) An Italian bee variety, Apis mellifera, has been introduced in India for honey production. Write about its merit over the other varieties.

(b) Why is excessive use of fertilisers harmful to the environment?

OR

 (a) What do you understand about the composite fish culture? Describe its advantages and disadvantages.

(b) On a cattle farm, there are fifteen cattle. How can you differentiate between diseased and healthy cattle without any diagnostic test?

Q36- Write the following questions:
                    (a) If the formula of chloride of an element M is MCl_3 , What is the formula of its carbonate?
                    (b) Calculate the molecular mass of Sulphuric acid, H_2SO_4 ? (S= 32 u, H = 1 u , O = 16 u)
                    (c) Identify the cation and anion present in NH_4Cl
                    (d) Two elements X and Y combine to form XY in the ratio 1:35.5 by mass, what mass of Y will combine with 2 grams of X ?
                    (e) Write the chemical formula of sodium sulphide.

SECTION E

Question No. 37 to 39 are case-based/data -based questions with 3 to 4 short sub-parts. Internal choice is provided in one of these sub-parts.

Q37- The Bohr model of the atom was proposed by Neils Bohr in 1915. It came into existence with the modification of Rutherford's model of an atom. Bohr's model consists of a small nucleus surrounded by negative electrons moving around the nucleus surrounded by negative electrons moving around the nucleus in orbits. The standard notation of an element with its atomic number and mass number is given as :

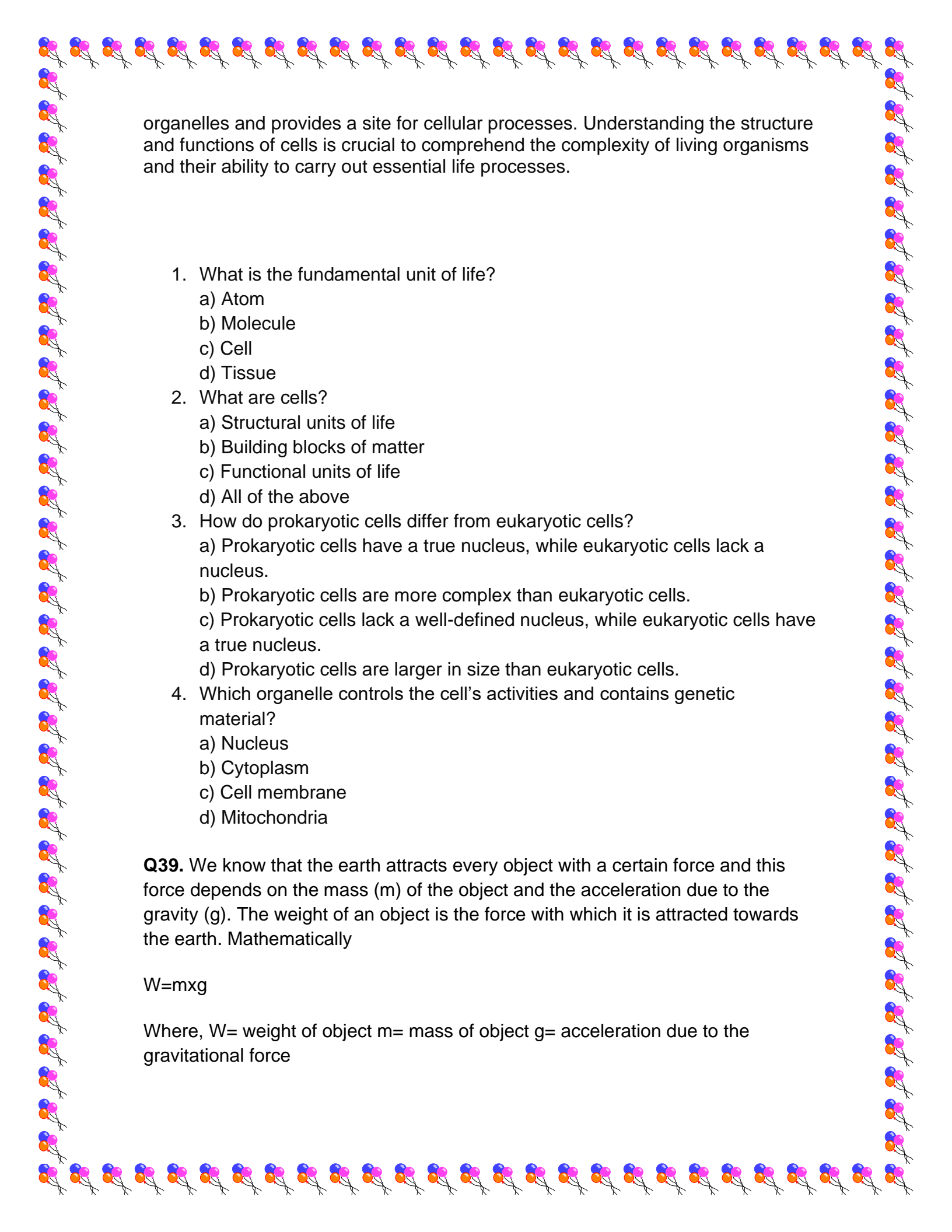$$^{(\text{Mass no.})A}_{(\text{Atomic no.})Z}X \quad \textbf{(Symbol of the element)}$$

 (i) Write the electronic configuration of Sodium. Draw the orbital diagram of Sodium according to Bohr's model of atom.

(ii) What are the number of protons and neutrons in $^{108}_{47}Ag$

(iii) Write an important application of Radioactive isotope. (2+1+1)

Q38 . The fundamental unit of life is the cell. All living organisms are composed of cells, which are the smallest structural and functional units of life. Cells vary in size, shape, and organisation in different organisms. They can be classified into two broad categories: prokaryotic cells and eukaryotic cells. Prokaryotic cells are simple and lack a well-defined nucleus, while eukaryotic cells are more complex and contain a true nucleus surrounded by a nuclear membrane. Within a cell, various organelles perform specific functions. For instance, the nucleus controls the cell's activities and contains genetic material, while the cytoplasm houses
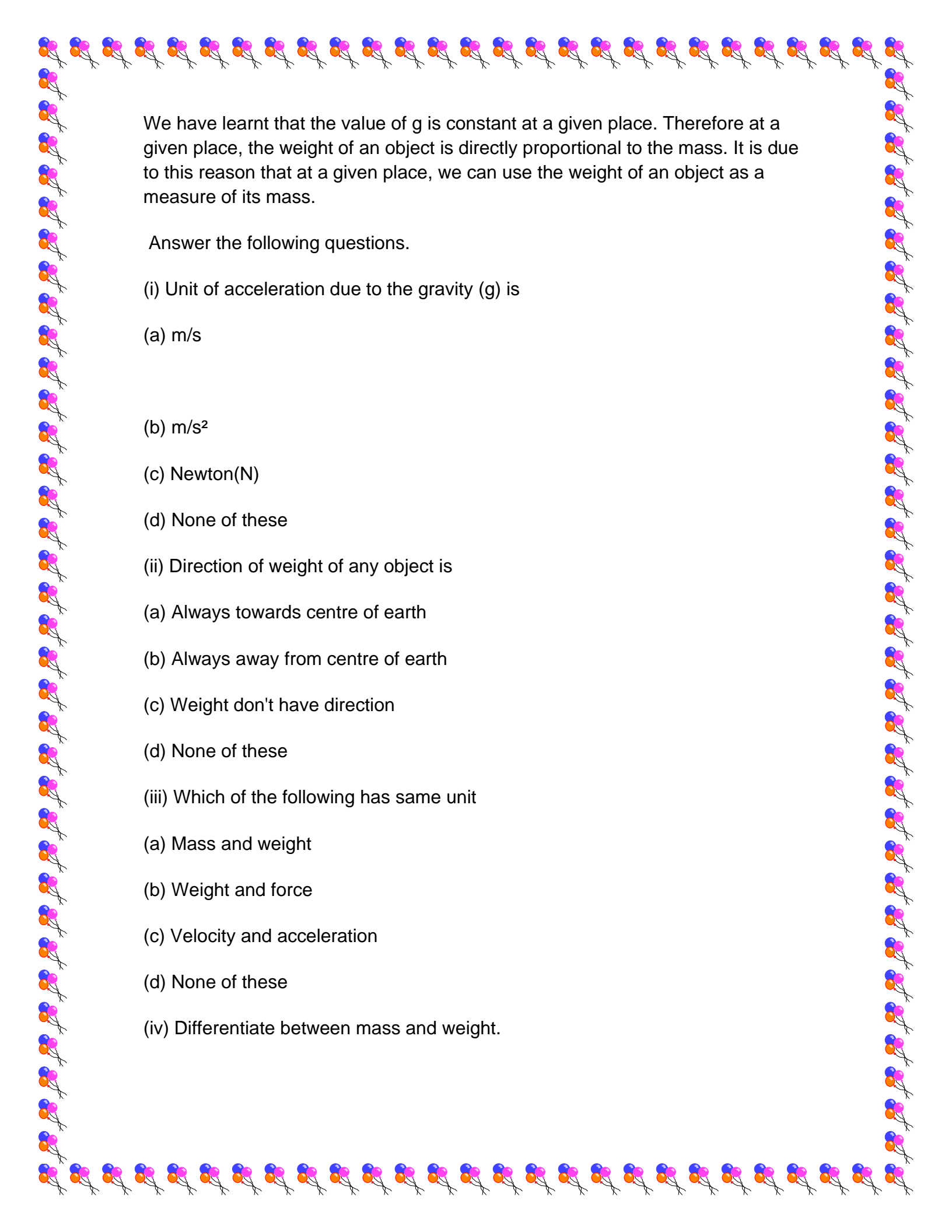
organelles and provides a site for cellular processes. Understanding the structure and functions of cells is crucial to comprehend the complexity of living organisms and their ability to carry out essential life processes.

1. What is the fundamental unit of life?
   a) Atom
   b) Molecule
   c) Cell
   d) Tissue
2. What are cells?
   a) Structural units of life
   b) Building blocks of matter
   c) Functional units of life
   d) All of the above
3. How do prokaryotic cells differ from eukaryotic cells?
   a) Prokaryotic cells have a true nucleus, while eukaryotic cells lack a nucleus.
   b) Prokaryotic cells are more complex than eukaryotic cells.
   c) Prokaryotic cells lack a well-defined nucleus, while eukaryotic cells have a true nucleus.
   d) Prokaryotic cells are larger in size than eukaryotic cells.
4. Which organelle controls the cell's activities and contains genetic material?
   a) Nucleus
   b) Cytoplasm
   c) Cell membrane
   d) Mitochondria

Q39. We know that the earth attracts every object with a certain force and this force depends on the mass (m) of the object and the acceleration due to the gravity (g). The weight of an object is the force with which it is attracted towards the earth. Mathematically

W=mxg

Where, W= weight of object m= mass of object g= acceleration due to the gravitational force

We have learnt that the value of g is constant at a given place. Therefore at a given place, the weight of an object is directly proportional to the mass. It is due to this reason that at a given place, we can use the weight of an object as a measure of its mass.

 Answer the following questions.

(i) Unit of acceleration due to the gravity (g) is

(a) m/s

(b) m/s²

(c) Newton(N)

(d) None of these

(ii) Direction of weight of any object is

(a) Always towards centre of earth

(b) Always away from centre of earth

(c) Weight don't have direction

(d) None of these

(iii) Which of the following has same unit

(a) Mass and weight

(b) Weight and force

(c) Velocity and acceleration

(d) None of these

(iv) Differentiate between mass and weight.