

Holy Angels' School  
2<sup>nd</sup> Semester 2021 - 2022

Std. VIII

Sub. Science

Time : 3 hrs

Date : 02 / 03 / 22

Marks : 80

General Instructions :

- 1) The question paper comprises three sections A, B and C. Attempt all the sections.
- 2) All questions in section 'A' are 1 mark questions. Section 'B' are 3 marks questions & section 'C' are 5 marks questions.
- 3) This question paper consists of total 36 questions.

Section A ( 1 Mark each)

- 1) Loudness of a sound is determined by it's  
a) Frequency                       b) Pitch                      c) Energy                      d) Amplitude
- 2) Which of these metal is deposited on iron to prevent corrosion of iron metal.  
a) Gold                              b) Silver                      c) Chromium                       d) Tin
- 3) 'Shooting Star' is the name given to  
 a) A comet                      b) A meteor                      c) An asteroid                      d) An artificial satellite
- 4) A battery is connected to LED wires from the negative ends of the battery & the LED are placed in different liquid. In the case of which liquid the LED will not glow ?  
 a) kerosene                      b) tapwater                      c) lime juice                      d) salt solution
- 5) When the angle of incident is  $60^\circ$ , then the angle of reflection is \_\_\_\_\_  
a)  $80^\circ$                               b)  $50^\circ$                                c)  $60^\circ$                               d)  $40^\circ$
- 6) Which eyedefect can be corrected by using a concave lens of suitable focal length ?  
 a) Myopia                              b) Cataract                              c) Hyperopia                              d) Glaucoma
- 7) Name the scale used to measure the magnitude of an earthquake. Richter  
Richter scale
- 8) What is asexual reproduction ? Give an example .
- 9) What is the range of audible vibrations for the normal human ear ? 20 Hz to 20,000 Hz
- 10) Name the hormones responsible for sexual maturity in males and females. Endocrine Glands
- 11) Define Dispersion
- 12) Write two damaging effects of lightning.
- 13) What is endocrine system ?
- 14) You can hear the sound of an approaching train long before you see it by placing your ear on the metal track why ?
- 15) Name two diseases caused by drinking polluted water.
- 16) What are asteroids ?

- 17) Name two green-house gases.
- 18) Suggest two way of minimising noise.
- 19) What is potable water ?
- 20) Write full form of CFC.

**Section B ( 3 marks each )**

- 21) Draw a well labelled diagram of electroscopes.
- 22) a) What is fertilization ?  
 b) Differentiate between external and internal fertilization. Give two examples of each.
- 23) Name the following :  
 a) A comet which seen after every 76 years.  
 b) A constellation of seven stars shaped like a big spoon.  
 c) A heavenly body which revolves around a planet.

OR

- 23) What are the safety measures you should adapt during earthquake (any 3 points)
- 24) Explain with an example why the pituitary gland is called the master gland.
- 25) Describe the structure of the Earth. *Draw Diagram*
- 26) a) Name the gases which cause acid rain.  
 b) Name two ill effects of acid rain.  
 c) What are the ways in which pollution from vehicles can be reduced.
- 27) a) Why it is important to take care of our eyes ?  
 b) Suggest 2 methods to maintain eyes in healthy state.
- 28) a) Name two impacts of Nitrogen Oxide on human health.  
 b) How does carbon monoxide cause harm to human body ?  
 c) What are the side effects of lead on human health.

29) What will you do to ensure your safety if lightning strikes when you are outdoors ?

30) **A) State True or False write correct statement :**

a) Electrons can be transferred by rubbing only.

**B) Answer in one word :-**

- a) Name the unit used to measure loudness.
- b) Sound waves having frequencies 261.62 Hz, 523.24 Hz, 784.86 Hz produce a musical sound ?

$$\begin{array}{r} 261.62 \\ + 261.62 \\ \hline 523.24 \end{array}$$

$$\begin{array}{r} 523.24 \\ + 261.62 \\ \hline 784.86 \end{array}$$

**Section C (5 marks each)**

31) How is the sex of a child determined and explain with the help of a diagram.

- 32) i) Bacteria reproduce by \_\_\_\_\_  
 ii) what is hermaphrodite.  
 iii) Define metamorphosis.  
 iv) Name any two viviparous animals.  
 v) What is menstrual cycle?

- 33) i) what is reflection ?  
 ii) What are the laws of reflection ?  
 iii) What is regular reflection ? State one advantage of regular reflection.  
 iv) Find the number of images formed by a plane mirror if the angle between them is  $60^\circ$ .

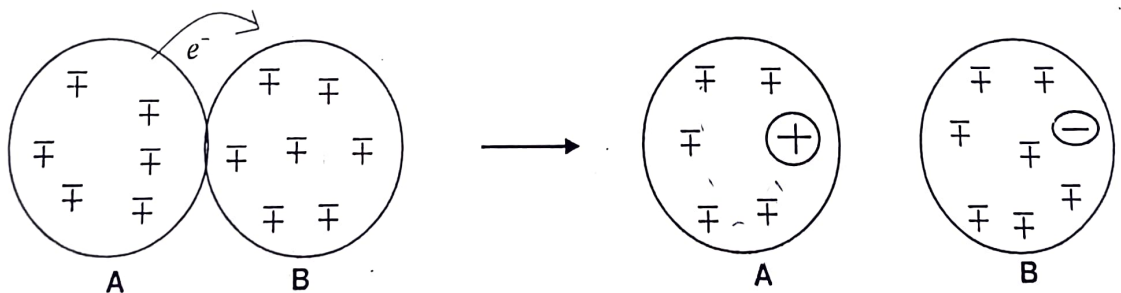
OR

33) Distinguish between Myopia and Hyperopia. Show with the help of suitable diagram how these defects can be corrected ?

- 34) i) Certain sounds are not audible to us even if they are loud. Explain.  
 ii) A person standing at a point 12m from a wall that produces an echo will not hear it why ?  
 iii) Write short note on "Ill effects of noise."  
 iv) Define a) Amplitude b) Frequency

- 35) i) What are the applications of communication satellites ?  
 ii) Mercury, venus, Earth and Mars are called the terrestrial planets, why ?  
 iii) Identify me :-  
 a) I am a rock that falls from space on the Earth's surface - \_\_\_\_\_  
 b) I have polar snowcaps - \_\_\_\_\_  
 c) I am the largest dwarf planet of the solar system - Pluto

36) Study the picture and answer the questions 'A' and 'B' are two different atoms. '+' indicate Proton and '-' indicate electron.



- i) Which atom loses electrons ?  
 ii) Which atom gain electrons ?  
 iii) Which atom will be positively charged ?  
 iv) Which atom will be negatively charged ?  
 v) When silk cloth is rubbed on glass rod what kind of changes develop on silk cloth and glass rod.

# Holy Angels' School

Date : 04-03-2022

2nd Semester Exam - 2022

Time : 3 hrs.

Subject :- Marathi

Marks : 80

Std.: VIII

- सुचना : १) प्रश्नपत्रिकेत एकूण क, ख, ग, घ असे चार खंड आहेत.  
२) प्रत्येक खंड लिहिणे आवश्यक आहे.  
३) प्रत्येक खंड व प्रश्न क्रमाने लिहिणे आवश्यक आहे.  
४) अक्षर सुवाच्च असावे.

खंड 'क' (अपठित विभाग) (१० गुण)

- प्र. १ अ) खालील उतारा वाचून प्रश्नांची उत्तरे लिहा. (प्रत्येकी १ गुण) (५)

लक्ष्मणराव किर्लोस्करांचा जन्म एका छोट्याशा खेड्यात झाला. लहानपणापासूनच त्यांचे नेमलेल्या अभ्यासात मुळीच लक्ष नव्हते. मोडकी-तोडकी घड्याळे, चित्रे, खडू, कोळसा अशा वस्तु ते गोळा करत. स्टेशनवर जाऊन आगगाडीचे इंजित पहात बसायला त्यांना खूप आवडे. शाळेत देखील गणित-संस्कृत असे विषय त्यांना मुळीच आवडायचे नाहीत. मात्र भूमिती, भूगोल, चित्रकला हे त्यांचे आवडते विषय. वयाच्या पंधराव्या वर्षी त्यांनी शिक्षण सोडून देण्याचा निश्चय केला. यंत्राची त्यांना विलक्षण आवड. त्यामुळे चित्रकलेचे शिक्षण सोडून ते एका भांडी बनविण्याच्या कारखान्यात काम करू लागले.

नुसतेच एखादे यंत्र चालवून त्यांचे समाधान होत नसे. ते यंत्र कसे बनवले आहे याकडे त्यांचे लक्ष असे. पूर्वीचा कसलाही अनुभव नसतांना एका छापखान्यात जर्मनीहून आणलेले छपाईयंत्र व ऑईल इंजिन बसविण्याचे कामही त्यांनी केले. नव्या नव्या यंत्रांशी खेळण्याचा त्यांना जणू छंदच जडला होता. प्रत्येक नवे यंत्र म्हणजे त्यांना एक नवे आव्हान वाटत असे.

- १) लक्ष्मणरावांचे आवडते विषय कोणते होते ? (१)  
२) लक्ष्मणरावांना कोणता छंद जडला होता ? (१)  
३) लहानपणी लक्ष्मणरावांना काय काय आवडे ? (१)  
४) अनुभव नसतानाही लक्ष्मणरावांनी कोणते काम केले ? (१)  
५) या उतार्याला योग्य शीर्षक द्या. (१)

- ब) खाली दिलेली कविता वाचून त्याखालील प्रश्नांची उत्तरे लिहा. (५)

‘प्रकाशातले तारे तुम्ही’

प्रकाशातले तारे तुम्ही, अंधारावर रूसा,

हसा, मुलांनो हसा ॥ धृ ॥

तुम्हां बोलवी ती फुलराणी

खेळ खेळती वारा पाणी

आनंदाच्या शिखरावरती, खुशाल जाऊन बसा ॥१॥

१) हणे हा ना धर्म आपुला  
हसण्यासाठी जन्म घेतला  
भारतभूच्या आदर्शाचा, मनी उमटू दे ठसा ॥२॥  
सर्व भागचा विसरा गुंता  
अरे उदयाच्या नकोत चिंता  
बघा, अरूण तो बाळांना रे, तुम्हां खुणावितो कसा ॥३॥

- उमाकांत काणेकर

- प्रश्न एका वाक्यात उत्तरे लिहा. (प्रत्येकी १ गुण)
- १) कवी मुलांना कोठे बसायला सांगत आहे ?
  - २) मुलांना कोण बोलावत आहे ?
  - ३) मुलांनी कशाची चिंता करू नये, असे कवीला वाटत आहे ?
  - ४) मुलांना कोण खुणावत आहे ?
  - ५) खेळ कोण खेळत आहे ?

खंड 'ख' (व्याकरण) (२२ गुण)

प्र. २ अ) जोड्या लावा. (प्रत्येकी १/२ गुण)

'अ' गट

- १) मंजुळ
- २) झिलमिलणारे
- ३) चिवचिवणाऱ्या
- ४) भरकटलेले

'ब' गट

- अ) चोची
- ब) जग
- क) चंद्रचांदणे
- ड) गाणे

ब) समानार्थी शब्द लिहा. (प्रत्येकी १ गुण)

- १) नदी २) सागर ३) वृक्ष ४) चंद्र ५) बुलंद ६) घाव

क) विरुद्धार्थी शब्द लिहा. (प्रत्येकी १ गुण)

- १) जळणे २) मंजुळ ३) जगणे ४) सजीव

ड) सामान्यरूपे ओळखा. (प्रत्येकी १ गुण)

- १) सृष्टीचे २) दुसऱ्यासाठी ३) संस्कारांची ४) सागराची

ई) पुढील शब्द शुद्ध स्वरूपात लिहा. (प्रत्येकी १ गुण)

- १) जीवण २) नदि ३) तूळस ४) निर्सग

फ) अचूक अर्थाचा पर्याय निवडा. (प्रत्येकी १ गुण)

१) जीव लावणे -

- a) गाणे म्हणणे b) आवडते होणे c) माया करणे

२) घाव सोसणे -

- a) प्रहार सहन करणे b) रागावून बोलणे c) तुकडे करणे

खंड 'ग' (पठित विभाग) (३३ गुण)

- प्र. ३ अ) रिकाम्या जागा पूर्ण करा. (प्रत्येकी १ गुण)
- १) दृष्टी देखिलें ..... ॥ *Full statement*
- २) माझे ..... भेटलें ॥
- ३) ..... म्हणे आले घरा ॥
- ४) ..... संगे बोरीया बाधळी ।
- ५) तयाच्या ..... तेचि होती ।
- ६) नाही तरी ..... वाहवा खरा ऐसा ।
- ७) पुस्तकांत सर्व धड्यांखाली ..... काहितरी दिलेले आहे.
- ८) व्यू.आर.कोड म्हणजे विवक ..... कोड.
- ९) मोबाईलवर व्यू.आर. कोड स्कॅनर हे ..... सॉफ्टवेअर डाऊनलोड करावे लागते.
- १०) व्यू.आर.कोड स्कॅनर केल्यानंतर आपल्याला पाठ, कविता, इतर घटक या संबंधीच्या काही ..... दिसतात.

(१०)

- ब) १) पुढील तक्ता पूर्ण करा.

कवीला जगणे शिकवणारे घटक	या घटकांपासून कवी काय शिकले ?
१) चंद्र, चांदणे	अ) -
२) पणती	आ) -
३) नदी	इ) -
४) पक्षी	ई) -
५) सागर, वृक्ष	उ) -

- २) आकृती पूर्ण करा. (प्रत्येकी १ गुण)

a) 

अभंगातील दोन सण	i) <input type="text"/>
	ii) <input type="text"/>

b) दिवस कसा आहे -

c) दृष्टीस दिसले -

d) सुख झाले -

e) 

अभंगातील श्राडे	i)
	ii)
	iii)

चंद्राच्या स्पशानि जुनाधित होते	i) <input type="text"/>
	ii) <input type="text"/>

(५)

g) हे जन संत दर्शनाने पावन होतात →

h) संतांच्या सहवासात काय साधावा →

३) पुढील संकल्पना स्पष्ट करा. (एकूण २) (प्रत्येकी २ गुण)

i) बुलंद हौसले -

ii) चोचीमधले दाणे -

४) जोड्या जुळवा. (प्रत्येकी ½ गुण)

'अ' गट

'ब' गट

i) सुगंधी झाड

अ) सुख

ii) उत्साह आणणारे

ब) शीण

iii) निरसला

क) चंदन

iv) जीवा

ड) संत

खंड 'घ' (लेखन कौशल्य) (१५ गुण)

प्र. ४ अ) पुढील सूचनाफलकाचे वाचन करून खाली दिलेल्या प्रश्नांची उत्तरे लिहा.

(५)

१) सूचनाफलक कोणत्या तारखेला लिहिण्यात आलेला आहे ?

(१)

२) सूचनाफलक कुठल्या विभागाकडून लिहिण्यात आला आहे ?

(१)

३) माननीय पंतप्रधानांनी कोणती योजना जाहीर केली आहे ?

(१)

४) मुंबई महानगरपालिकेने कोणती योजना राबविण्याचे ठरवले आहे ?

(१)

५) शहर स्वच्छ ठेवण्यासाठी काय काय करावे ?

(१)

सूचना फलक

विषय : 'स्वच्छ मुंबई, सुंदर मुंबई' योजनेत नागरिकांनी सहभाग घेण्याविषयी सूचना

दिनांक : २६ जानेवारी

सार्वजनिक आरोग्य विभाग मुंबई महानगरपालिका

मुंबई शहरात राहणाऱ्या तमाम नागरिक, दुकानदार, फेरीवाले, भाजीविक्रेते व इतरही सर्वास कळविण्यात येत आहे की, आपल्या माननीय पंतप्रधानांनी 'स्वच्छ भारत, रोगमुक्त भारत' ही योजना जाहीर केली आहे. याच योजने अंतर्गत मुंबई महानगरपालिकेने ही 'स्वच्छ मुंबई, सुंदर मुंबई' ही योजना राबविण्याचे ठरवले आहे.

मुंबई सार्वजनिक आरोग्य खात्यातर्फे तमाम नागरिकांना कळविण्यात येत आहे की, त्यांनी केरकचरा, घाण, विड्या सिगारेटची थोटेके, कागदाचे बोळे कचरापेटीतच टाकावे. आपले शहर स्वच्छ ठेवण्यास आम्हांस सहकार्य करावे. आपली मुंबई स्वच्छ व सुंदर ठेवणे हे प्रत्येक नागरिकाचे कर्तव्य आहे याची नोंद घ्यावी.

सार्वजनिक आरोग्य विभाग,

मुंबई महानगर पालिका

- ब) शब्दकोशाचा तुम्हाला कळलेला उपयोग तुमच्या शब्दांत लिहा. (५)
- किंवा  
अणूरेणूतुनि, प्रगटति, विज्ञान, प्रकाश, दिव्य, क्रांती या सहा शब्दांचा शब्दकोशातील क्रम स्पष्टीकरणासह सांगा. (५)
- क) घाटातून जाताना घ्यायची काळजी या विषयीच्या पाट्या लिहा. (५)
- किंवा  
बागेत लावण्यात येणाऱ्या सुचनांच्या पाट्या लिहा. (५)



Holy Angels' School  
2<sup>nd</sup> Semester 2021 - 2022

Std. VIII

Sub. English

Date : 03 / 03 / 22

Marks : 80

Section A

Q:1 Read the passage and answer the questions given below :-

(6)

At school, Ashoke and Gogol are greeted by the secretary, Mrs. McNab, who asks Ashoke to fill out a registration form. He provides a copy of Gogol's birth certificate and immunization record, which Mrs McNab puts in a folder along with the registration "This way," Mrs Mc Nab says leading them to the principal's office.

Candace Lapidus, the name on the door says. Mrs Lapidus assures Ashoke that missing the first week of Kindergarten is not a problem, that things have yet to settle down. Mrs. Lapidus is a tall, slender woman with short white-blond hair. She wears frosted blue eye shadow and a lemon yellow suit. She shakes Ashoke's hand and tells him that there are two other Indian children at school, Jayadev Modi in the third grade and Rekha Saxena in fifth. Perhaps the Gangulis know them ? Ashoke tells Mrs Lapidus that they do not. She looks at the registration form and smiles kindly at the boy. Gogol is dressed in powder blue pants, red and white canvas sneakers, a striped turtleneck top.

Questions :-

- 1) Who greeted Ashoke and Gogol in the school ?
- 2) How was Gogol dressed up ?
- 3) Write the meaning of the word 'immunization' .
- 4) Name the two Indian children at the school.
- 5) What is the name written on the door ?
- 6) Describe Mrs. Lapidus appearance ?

Q:2 Read the unseen passage and answer the question given below :-

(6)

When we enter New York harbour, the first thing we see is the Statue of Liberty. What impresses us the most is its size and magnificance. Have you ever wondered how it came to be there ? The Statue of Liberty was a gift from the people of France to mark the one hundred year anniversary of American Independence. In 1869, sculptor Frederic Auguste Bartholdi began to plan his concept for the monument.

Bartholdi chose the look of classic Greek and Roman figures. He envisioned Liberty as a strong and proud figure, one who personified not only the majestic Greek goddesses of the past, but also the working men and women of the present. Finally, in 1884, the work was finished, and Statue of Liberty was packed into 214 crates and sent to New York city. Only one problem stood in the way. While the French had a raised a lot of funds to build its foundation. It was not until a New York newspaper implored for donations that money became available. Finally, on 28<sup>th</sup> October 1886, Americans celebrated the unveiling of the Statue of Liberty.

Questions :

- 1) Why was the Statue of Liberty given as a gift to America by France ?
- 2) What is the name of the sculptor of the monument 'the Statue of Liberty' ?

7/14  
1884  
1869  
00/16

- 3) What did the sculptor imagine the Statue of Liberty to be ?
- 4) How many years did it take to unveil the Statue ?
- 5) Write word from the passage which means the same as "imagined".
- 6) Which year the Statue of Liberty was unveiled ?

### Section B

Q:3 Choose the correct answer :-

(5)

1) The name 'Nikhil' means :

- a) the one above all
- b) the one who cannot be defeated.
- c) the one who encompasses all.

2) Jatin was a \_\_\_\_\_ from a nearby village.

- a) farmer
- b) potter
- c) hawker

3) The last leaf on the tree made Johnsy realise that.

- a) she could brave the storm just as the leaf had.
- b) she was as weak as the leaf.
- c) new leaves would sprout soon.

4) Calpurnia cried out in her sleep because she was

- a) sad
- b) frightened
- c) disturbed by some visitors

5) Mrs. McNab was

- a) The secretary to the principal at the elementary school.
- b) Ashoke's colleague at work.
- c) Gogol's first teacher.

Q:4 Answer the following in 2 - 3 sentences (any 8) :-

- 1) Why was the Abbot of Aberbrothok loved by all ?
- 2) Why did Gogol need a new name ?
- 3) How does the poet describe life ?
- 4) What did Pip do at the dawn the next day ?
- 5) List four of Macaviti's abilities and four of his crimes .
- 6) Describe Calpurnia's dream.
- 7) According to the poet, what is the most effective way to kill a tree ?
- 8) How did Johnsy recover ?
- 9) What led to Fundan's disappointment ?

Q:5 Think and answer (any 4) :-

(12)

- 1) Why was Mrs Lapidus confused by the idea of a good name ?
- 2) What message does the poem 'The Inchcape Rock' give us ?
- 3) Why do you think the poet has called his poem 'A Psalm of life' ?
- 4) In what sense was Behrman's last work truly a masterpiece.
- 5) Why was Pip worried when he and Joe went to see how the soldiers hunted down the convicts ?

Q:6 Write the meanings of :-

(10)

- 1) Portents
- 2) amiss
- 3) forge
- 4) fleeting
- 5) truncate
- 6) surge
- 7) Abbot
- 8) gale
- 9) mirthful
- 10) solemn

### Section C

Q:7 Do as directed :-

(15)

- 1) The drama began, when the audience seated.  
(Change the sentence into compound sentence)
- 2) Women who are courageous rise, above all challenges.  
(Change the sentence into simple sentences)
- 3) This issue will be taken up in the presence of the teacher.  
(Change the sentence into complex sentence)
- 4) Change the sentence from Indirect to Direct speech :
  - a) Ram asked Shyam whether he was sure that it was unintentional.
  - b) The Saint said that we should always care and share.
- 5) Change the sentence from Direct to Indirect speech :-
  - a) "Present the culprit", said the Judge.
  - b) "Faith is not something to grasp, it is a state to grow into," said Mahatma Gandhi.
- 6) Join the following sentences using Infinitives :
  - a) My parents will hear this news. They will be shocked.
  - b) I stand for my principles. I am not ashamed of it.
- 7) Join the following sentence by using a participle.
  - a) He located his last key. He opened his locker.
  - b) (Garden) is my hobby.  
(Rewrite using the Gerund form of verb)
- 9) My mother is the anchor of my life.  
(Name and explain the figure of speech)

10) Oh Death ! Why do you come without a warning ?  
(Name and explain the figure of speech)

11) Pick out the Non-finite verbs and state its kind.

- a) I tried to find the borrowed book.  
b) Smoking is injurious to health.

#### Section D

#### Writing Skills

Q:8 A) Read the paragraph and complete the table given below :-

(5)

#### Cleanliness - Its importance

Cleanliness is next to godliness. Personal cleanliness and cleanliness of our surrounding both are equally important. To maintain personal health, we should have a bath daily using soap and water. We should wear washed, clean clothes. We should not eat uncovered food or food prepared unhygienically. We should keep our surroundings clean. We should not litter. We should always use dustbins. We should inform the authorities if we find garbage or waste littered on the roads. We should never spit in public. We should not do anything to ruin the cleanliness of our surroundings.

OR

B) Read the paragraph and draw the tree diagram :

The tea we buy is usually classified according to its leaf size. Accordingly we have (i) Assam type of tea characterized by largest leaves. (ii) China type characterized by the smallest leaves and (iii) Cambodia characterized by leave of Intermediate size.

Q:9 Letter writing :-

(5)

a) Write a letter to the principal of your school asking for 6 days leave to visit your native. P10

OR

b) Write a letter to your mother, thanking her for being your pillar of strength during the most difficult times.

Note

☆ All students of STD VII and IX must note that on 5<sup>th</sup> March the exam timing will be 11:00 am instead of 2:30 pm. This change is only for 5<sup>th</sup> March i.e. Saturday

☆ Note STD VIII will be having Marathi paper on 4<sup>th</sup> March at 2:30 pm

No change for 4<sup>th</sup> March.

# Holy Angels' School

Date : 07-03-2022

2nd Semester Exam - 2022

Time : 3 hrs.

Subject :- Mathematics

Marks : 80

Std. : VIII

- Q. 1 A) Fill in the blanks :- (5)
- 1) The probability of getting a blue marble from a bag containing 5 blue and 7 green marble is \_\_\_\_\_.
  - 2) The change in which an increase or decrease in one quantity result in a corresponding decrease or increase in another quantity, such that their product remains constant is called \_\_\_\_\_.
  - 3) The interest calculated uniformly on the Principal for the loan period is \_\_\_\_\_.
  - 4) \_\_\_\_\_ is the amount of a substance that a container can hold.
  - 5) The plane consisting of two perpendicular number lines that intersect at a point is called a \_\_\_\_\_.

B) Match the column.

Group 'A'

Group 'B'

- |                          |  |
|--------------------------|--|
| 1) Area of trapezium     | 1) $\pi r^2 h$                               |
| 2) Area of quadrilateral | 2) $\frac{1}{2} \times h \times (a + b)$     |
| 3) Volume of a cylinder  | 3) $\frac{1}{2} \times d \times (h_1 + h_2)$ |
| 4) Volume of a cuboid    | 4) $\frac{1}{2} \times (d_1 \times d_2)$     |
| 5) Area of rhombus       | 5) $l \times b \times h$                     |

C) Solve the following.

- 1) Without actually plotting the following points, state the quadrant in which they lie.
  - i)  $K(-9, -6)$     ii)  $A(-12, 3)$
- 2) What is the probability of obtaining an odd prime number when a die is thrown ?
- 3) Find the volume of a cube of side 1.4 mm.
- 4) What is the side of a square whose area is 121 sq.cm ? *Total TSA = 6 \times (Side)^2*
- 5) If Suraj can finish a work in 12 days, how much work can he complete in a day ?
- 6) Convert 18 km/h to m/s.
- 7) Find the value of x if the terms in each are in proportion.
 

$15 : x :: 18 : 54$
- 8) Write the formula to calculate simple interest.
- 9) Write algebraic expression for the following statement.
 

5 added to the sum of 5b & 3m.
- 10) Resolve into factors :  $7m + 14$

*LSA = 4 \times G*  
*121 = 4 \times G*

$\frac{121}{4} = 30.25$

$\frac{14}{4} = 3.5$

$\frac{11}{4} = 2.75$

$\frac{14 \times 14}{4} = 49$

$\frac{196}{4} = 49$

$\frac{196 \times 14}{4} = 784$

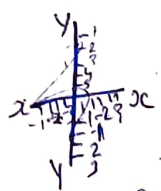
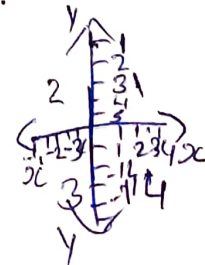
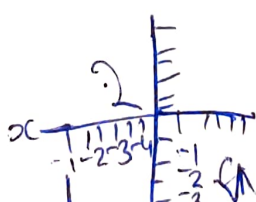
$\frac{196 \times 14}{4} = 784$  (10)

*2.74*

*121*

*5 \times 54 = 270*

*270 \div 18 = 15*



Q. 2) Solve the following. ( any 6)

(12)

1) Divide :  $(36m^4n^6 + 45m^3n^2) \div 9m^2n^2$

2) Find two number one-third of which is 29.

3) Find the time taken by a train running at a speed of 90 km/h to cover a distance of 360 km.

4) Of 1000 bolts in a box, 20 are defective. Find the probability of picking :

i) a defective bolt ii) a good bolt

5) Mark these rational numbers on a number line :

$\frac{-1}{5}, -3$

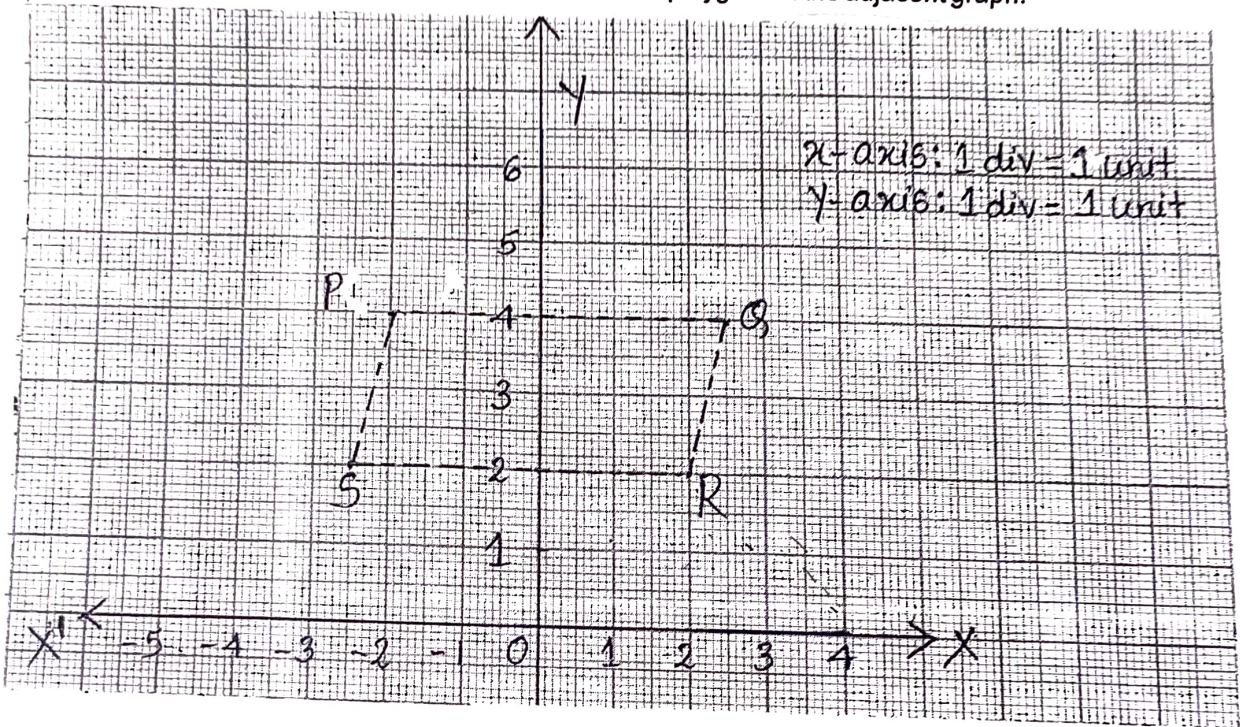
10

6) Find the radius of a cylinder of height 21 cm and volume  $3234\text{cm}^3$ .

7) Write the coordinates of the vertices of the polygons in the adjacent graph.

(10)

and



Q. 3) Solve the following. (Any 8)

(24)

1) In a factory, the production of bolts increased from 64,000 to 1,25,000 in 3 years. Find the rate of increase of production.

2) A stack of 1071 sheets of paper is 6.3cm thick.

i) What will be the thickness of a stack of 15,000 sheets ?

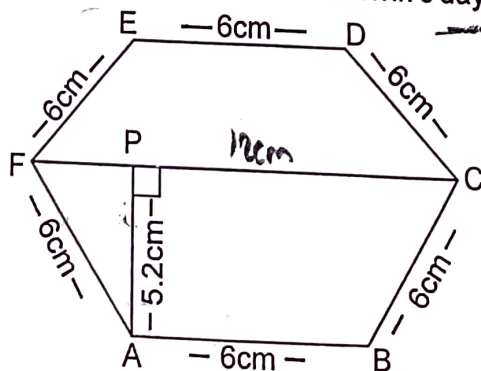
ii) How many sheets will be there in a stack 15cm thick ?

3) Liya can finish reading a book in 8 days if she reads for  $4\frac{1}{2}$  hours a day. How many hours per day should she read if she wants to finish the book in 6 days ?

4) Find the area of the given polygon

divided as follows :

A hexagon divided into two trapezium.



$$\begin{array}{r} 122 \\ 3234 \\ \times \quad 7 \\ \hline 22638 \end{array}$$

$$\begin{array}{r} 21 \\ \times 4 \\ \hline 84 \end{array}$$

$$\begin{array}{r} 1029 \\ 22 \overline{) 22638} \\ \underline{22} \phantom{00} \\ 006813 \\ \underline{44} \phantom{00} \\ \phantom{00}198 \end{array}$$

$$\begin{array}{r} 1 \\ \times 22 \\ \times 9 \\ \hline 198 \end{array}$$

- 5) If the cost of painting a cubical block of wood at the rate of ₹ 2.50 per  $\text{cm}^2$  is ₹ 1500, find the surface area and the edge of the block of wood.
- 6) From a pack of cards with two jokers, one card is drawn out. Find the probability of:
- getting a joker.
  - getting a face card.
  - getting a red ace.
- 7) Plot the points P (-10, 10); Q (30, 10); R (50, 50); S (10, 50) in a coordinate plane and join them in order. What figure do you get?
- 8) Find the amount and compound interest compounded annually on : ₹ 20,000 at 9% p.a. for 2 years.
- 9) A road roller 140cm long and 77cm in diameter makes 300 revolutions to level a field completely. Find the area (in  $\text{m}^2$ ) of the field.

Q. 4) Solve the following. (any 6)

1) Draw a linear graph for the following data.

x	10	20	30	40	50
y	150	200	250	300	350

From the graph, find the value of

i) y when x = 25    ii) x when y = 310.

$$\begin{array}{r} 44 \\ \times 11 \\ \hline 44 \\ 440 \\ \hline 484 \end{array}$$

(24)

2) A teacher made a pack of 50 cards and numbered them 1 to 50. She asked one of the students to pick a card. What is the probability that the card picked is:

- a Prime number?
- a multiple of 5?
- a square number?
- a cube number?

$$\begin{array}{r} 2 \\ \times 72 \\ \hline 144 \\ 1440 \\ \hline 1584 \end{array}$$

3) In a book of 600 pages, there are 180 words per page on an average. If the number of pages of the book is reduced to 480, how many words per page on an average will the book contain?

4) The numerator of a fraction is 7 less than the denominator. If one and one-third is added to it, the fraction obtained is  $\frac{14}{9}$ . Find the original fraction.

5) Factorise:

i)  $6x^2 + 9axy - 4axy - 6a^2y^2$

$$2 \frac{4}{3} \frac{1}{3}$$

$$\frac{x-7}{2}$$

ii)  $6(2a-b) - 15(2a-b)^2$

$$\begin{array}{r} 2 \\ \times 4034 \\ \hline 8068 \\ 12052 \\ 48108 \\ \hline 80680 \end{array}$$

6) The area of four walls of a room is  $57.6\text{m}^2$ .

i) If the height of the room is 3.2m, find the perimeter of the floor.

ii) If the length is 2m more than the width of the room, find the length and the width of the room.

7) The variables x & y in the given table, vary directly. Find the values of a, b, c & d.

x	1.8	4.8	a	b	9.6
y	0.6	c	2.1	2.7	d

$$\frac{14 \times 1}{9 \times 1} = \frac{14}{9} \quad \frac{4 \times 3}{3 \times 3} = \frac{12}{9}$$

$$\frac{14}{9} = \frac{4}{3}$$

$$\frac{14}{9} = \frac{12}{9} = \frac{4}{3}$$