RAMANUJAN GLOBAL SCHOOL, MANESAR

WINTER HOLIDAY HOMEWORK

GRADE-IX

Dear student

Holidays are integral parts of a student's life. It is a time to explore and a time to learn in different ways. When holidays are given a meaningful direction, it results in a productive and enjoyable time. Let's use these holidays to pursue some hobbies and apply our minds creatively to learn new things and to bring a change in the environment, in our individual way.

GENERAL INSTRUCTIONS TO BE FOLLOWED WHILE DOING HOMEWORK:

1.Take a printout of the holiday homework worksheet.

2.Homework will be assessed for the neat handwriting, presentation,creativity and submission of the work on time.

3.Parents can be facilitator at home. However, the work should be done independently by the child in his/her handwriting.

ENGLISH : Learn ch – 3 to 5 (FOOTPRINT) and ch – 4 to 7 (FIRST FLIGHT).

Write summary of these chapters in fair notebook.

SCIENCE : Learn ch – 9, 10 and 11.

SST : Learn exercise, MCQs ,Assertion And reasoning , Extra Questions of following chapters. **GEO :** ch-4, **HISTORY :** ch-4, **ECO :** ch-4

      CIVICS : ch-5

Learn/write states, UTs and their capitals.

On the map of India locate and label the following features with appropriate symbols.

1) Konkan coast
2) Malabar coast
3) Coromandel coast

MATHS : Solve 20-20 questions based on concept of surface area, volume and statistic**.**

Learn and Write formulas of surface area, volume and statistic.

COMPUTER : Learn unit 7 & 8.

हिंदी :क्षितिज -पाठ-**10,11,12** के प्रश्न उत्तर याद कीजिए और पाठ-5,6 के भावार्थ और प्रश्न उत्तर याद कीजिए।

सभी पाठो को पढ़कर **50** अतिघुत्तरीय प्रश्न बनाओ।

कृतिका- पाठ **1 ,2** के प्रश्न उत्तर याद कीजिए।

हिंदी व्याकरण- दो औपचारिक स्ववृत, दो औपचारिक ई-मेल और दो संदेश लिखिए।

Note:-The school will remain closed for the Classes 8th to 10th from 31st Dec 2024 to 05Th Jan 2025 and re-open from 06th Jan 2025 on as usual time.

During Winter Vocation, The school reception will open from 08:30 am to 01:30pm so kindly submit the fee for the month of January.

Solve the exercise given below :

ENGLISH

Robert Bruce and the Spider

Read the story below.

Robert Bruce, who was the King of Scotland, was greatly loved by his people. Scotland was captured by the British. Being brave, Robert Bruce tried his best to free his country from the British but could not succeed. Robert Bruce then escaped into a jungle and hid himself inside a cave. He was very depressed. One day he saw a spider who was trying to climb the wall to reach the cobweb. The spider rose inch by inch, on the thread of its web but fell down, when it was just a few inches away from its destination. The spider repeated the attempts to climb, many a time, but fell down. The spider repeated losing heart. The spider was succeeded in its tenth attempt. Robert Bruce was astonished at the courage and determination of the spider. He learnt an important lesson from this tiny creature. He came out of the hiding, gathered his forces and led a very strong attack on the British forces. He was able to defeat his enemy.

Answer each question.

1. **Who was Robert Bruce?**

   _____

2. **Where did Robert Bruce escape?**

   _____

3. **Where was spider trying to climb?**

   _____

4. **Why Robert Bruce was astonished?**

   _____

5. **What did he learn from the spider?**

   _____

Practice

E   Change the following into **indirect speech**.

1.   He said to me, "Give me some money."

   _____

2.   The teacher says, "Don't make a noise."

   _____

3.   The sister said to her younger brother, "Don't dirty your clothes while playing."

   _____

4.   The nurse said to a little boy, "Have the soup made by your mom."

   _____

5.   The businessman said, "Get out of my office."

   _____

6.   The lion said, "Don't tease the king of the jungle."

   _____

7.   She said to her teacher, "Give me lots of assignments."

   _____

8.   They said, "Never hurt the feelings of your friends."

   _____

Science

1. Gravitation is the force of _____

A both

B none

C repulsion

D attraction

2. What is the value of G?

A 6.80×10^{12}

B 7.97×10^{-10}

C NONE

D 6.67×10^{-11}

3. What is the SI unit of G?

A unitless

B none

C Nm^2/kg^2

D Nm^2/kg

4. Gravity is the phenomenon between

A none

B Earth and moon

C Earth and you

D Earth and any object

5. If a big stone and a small stone when dropped from a height, then both will strike the ground at the same time bcoz :

A none

B the value of g does not depend of mass of object

C both a and b

D the value of g depends on mass of object

I

1. Time taken by an object to complete one oscillation is called _____.

2. Loudness is determined by the _____ of vibration.

3. The unit of frequency is _____.

4. Unwanted sound is called _____.

5. Shrillness of a sound is determined by the _____.

6. The number of oscillation in one second is called _____.

7. The hearing range of human ear is _____.

8. Sound cannot travel in _____.

9. Sound can travel in _____.

10. The pitch of sound depends on _____.

Choose the correct answer :

1. Eardrum is a part of _____ [sound producing organ or hearing organ]

2 The voice box is also called [Larynx / mouth)

3. Large amplitude of sound vibrations will produce _____.[Loud sound / slow sound)

4. Voice of which of following is likely to have minimum frequency _____[A Man / A woman]

5. The unit of loudness is _____. (decibel / Hertz)

1. Formula of work

A	ma	B	g
C	Fs	D	J

2. SI Unit of work

A	NM	B	J
C	nm^2	D	none of these

3. work is a

A	none	B	both a & b
C	vector quantity	D	Scalar quantity

4. Two conditions of work done

_____
_____
_____
_____

5. what is energy?what is it's SI unit?

_____
_____
_____
_____
_____

I A CHOOSE THE CORRECT ALTERNATIVE

1. The revolutionary who shot Mr. W.C. Rand, the Plague Commissioner, was _____.

(A) Damodar Chaphekar   (B) Rajguru   (C) Vasudev Balwant Phadke

2. The first Secretary of the Indian National Congress was _____.

(A) A. O Hume   (B) C. R. Das   (C) K. T. Telang

3. The lady who unfurled the Indian flag at Stuttgart in Germany was _____.

(A) Kalpana Dutta   (B) Madam Cama   (C) Shanti Ghosh

4. Who staged an uprising against the British Rule in 1879?

(A) Damodar Chaphekar   (B) Rajguru   (C) Vasudev Balwant Phadke

5. The first President of Indian National Congress was _____.

(A) A. O. Hume   (B) Womeshchandra Bannerjee   (C) K. T. Telang

6. Who founded a revolutionary organization called "Abhinav Bharat"?

(A) Bhagat Singh   (B) Bal Gangadhar Tilak   (C) Vinayak Damodar Sawarkar

7. In which year the first Indian political party (INC) was formed?

(A) 1875   (B) 1885   (C) 1895

8. Who played a key role in the foundation of the Indian National Congress?

(A) A. O. Hume   (B) Womeshchandra Bannerjee"   (C) K. T. Telang

9. Lord Curzon partitioned Bengal in _____.

(A) 1905   (B) 1909   (C) 1919

10. Who started the public celebrations of Shivaji festival and Ganesh festival?

(A) Aurobindo Ghosh   (B) Bal Gangadhar Tilak   (C) Vinayak Damodar Sawarkar

11. The British Government passed the Rowlatt Act in _____.

(A) 1905   (B) 1909   (C) 1919

12. Who started the newspaper "New India"?

(A) Aurobindo Ghosh   (B) Bal Gangadhar Tilak   (C) Bepin Chandra Pal

13. The Swaraj Party was formed in _____.

(A) 1920   (B) 1921   (C) 1922

14. Subhash Chandra Bose formed the "Forward Block" in _____.

(A) 1914   (B) 1939   (C) 1942

15. Who became the viceroy of India in 1947?
(A) Lord Mountbatten   (B) Lord Wavel   (C) Robert Clive

Q.1   Fill in the blanks.   [7 × 1 = 7]

1.   The barter system of exchange essentially requires a feature called _____.
2.   Since the very early ages, Indians used _____ and _____ as money.
3.   The Reserve Bank of India issues currency notes on behalf of the _____.
4.   Banks accept the deposits of people and also pay an amount called as _____ on such deposits.
5.   Every loan agreement specifies _____ which the borrower must pay to the _____ along with the repayment of the _____.
6.   Besides banks, the other major source for a cheap credit in the rural areas is the _____.
7.   Periodically, banks have to submit information to the Reserve Bank of India on how much they are _____, to whom, at what _____, et cetera.

Q.2   Choose the one answer which is MORE suitable from the rest in the following sub-questions.
                                                                                                                    [6 × 1 = 6]
1.   Following is an example of obtaining credit from bank to meet the working capital needs of production.
      a.   Complete the factory's production in time.
      b.   Buy more raw materials for the seasonal demands.
      c.   Increase profits by increasing sales.
      d.   Pay for rent, wages, and salaries.
2.   Paying-off debt is repaying the:
      a.   Loan previously taken.
      b.   Loan previously taken with interest.
      c.   Due interest on the loan previously taken.
3.   Indian banks currently hold about the following deposits as cash in percentage:
      a.   14.
      b.   15.
      c.   16.
      d.   17.
4.   A typical Self Help Group (SHG) has the following number of members:
      a.   12.
      b.   13.
      c.   14.
      d.   15.
5.   The following helps borrowers to overcome the problem of lack of a collateral security:
      a.   Self Help Groups.
      b.   Properties.
      c.   Banks.
      d.   Village Heads.
6.   The Grameen Bank of Bangladesh had over _____ million members in about _____ number of villages in October, 2014 in Bangladesh.
      a.   5.82; 80,265 respectively.
      b.   6.77; 80,315 respectively.
      c.   7.98; 81,200 respectively.
      d.   8.63; 81,390 respectively.

	Column A		Column B
(i)	Barter system	(a)	Supervises the functioning of banks
(ii)	Debt-trap	(b)	Commodity for commodity exchange system
(iii)	Formal sector loans	(c)	Pushes the borrower into a situation from which recovery is very painful
(iv)	Reserve Bank of India	(d)	Loans from banks and cooperatives

1. Write the class size in each of the following:
   (a) $0 - 4, 5 - 9, 10 - 14$ (b) $10 - 19, 20 - 29, 30 - 39$ (c) $5 - 5.01, 5.01 - 5.02, 5.02 - 5.03$
2. Write class size and class limits in each of the following if the class marks are:
   (a) 104, 114, 124, 134, 144, 154 (b) 47, 52, 57, 62, 67, 72, 77 (c) 12.5, 17.5, 22.5, 27.5, 32.5, 37.5
3. The monthly wages of 30 workers in a factory are given below:-
   830, 835, 890, 810, 835, 836, 869, 894, 898, 890, 820, 860, 832, 833, 855,
   845, 804, 808, 812, 840, 885, 835, 836, 878, 840, 868, 890, 806, 840, 890
   (a) Form frequency distribution table with class size 10
   (b) Find cumulative frequency
   (c) Draw histogram and frequency polygon
4. Draw histogram and frequency polygon:

Marks	0 - 10	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60	60 - 70
No. of students	5	10	4	6	7	3	2

5. The following are the scores of two groups of class IX students in a test.

Scores	Group A	Group B
50 – 52	4	2
47 – 49	10	3
44 – 46	15	4
41 – 43	18	8
38 – 40	20	12
35 – 37	12	17
32 - 34	13	22
Total	92	68

6. The mean of 40 observations was 160. It was detected on rechecking that the value of 165 was wrongly copied as 125 for computation of mean. Find the correct mean.
7. The mean monthly salary of 10 members of a group is Rs 1445, one more member whose monthly salary is Rs 1500 has joined the group. Find the mean monthly salary of 11 members.
8. If the mean of the following distribution is 6, find the value of P.

X	2	4	6	8	P + 5
F	3	2	3	1	2

9. Draw histogram of the weekly pocket expenses of 125 students of a school given below:

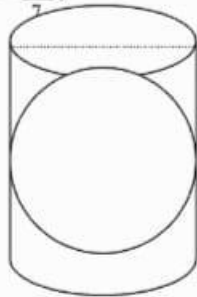| Weekly expenses (Rs)	No of students
10 – 20	10
20 – 30	15
30 – 50	40
50 – 60	25
60 – 90	30
90 - 100	5

Surface Areas and Volumes

<1M>

1. Find the area enclosed between two concentric circles of radii 4 cm and 3 cm.

2. A cuboid has total surface area of 40 sq m and its lateral surface area is 26 sq m. Find the area of base.

3. The area of three adjacent faces of a cuboid are x, y and z. If the volume is V, prove that $V^2 = xyz$

4. A sphere is double height as the cube The ratio of their volume is:
(A) $88:21$ B) $44:21$ C) $8:21$ (D) $88:23$

5. The lateral surface area of a right circular cylinder with base radius 8m & height 14m is:
(A) 714 sq m   B) 724 sq m   C) 704 sq m   D) None

6. The number of surfaces in right circular cylinder is:
(A) 3   B) 2   C) 4   D) 1

7. A sphere and a cube are of the same height. The ratio of their volume is-
(A) 11:21   B) 21:11   C) 3:4   D) 4:3

8. A cylindrical rod whose height is 8 times of its radius, is melted and recast into spherical balls of same radius. The no. of balls will be:
(A) 4   B) 3   C) 6   D) 8

9. The diameter of a copper sphere is 6 cm. It is beaten and drawn into a wire of diameter 0.2 cm. The length of wire is ....

(A) 3600 cm   B) 360 cm   C) 36 cm   D) None

10. The height and radius of a cone are 3 cm and 4 cm respectively. Its surface area is-

(A) 12 cm^2 B) 6 cm^2 C)   cm^2 D) $57\frac{3}{4}$ cm^2

11. The ratio of the volume & surface area of a sphere of unit radius is-

(A) 1:3   B) 4:3   C) 3:1   D) 3:4

12. Curved surface area of an ice-cream cone of slant height 12 cm is 113.04 cm^2. Find the base radius? (take $\pi = 3.14$)
(A) 1 cm   B) 2 cm   C) 3 cm   D) None

13. The height of a right circular cone is 16 cm & its base radius is 12 cm. Find the curved surface area. (take $\pi = 3.14$)
(A) 755 cm^2 (B) 753.6 cm^2 (C) 750 cm^2 (D) None

14. The radius of the cylinder whose lateral surface area is 704 cm^2 & height is 8 cm is:
(A) 14 cm   (B) 4 cm   (C) 6 cm   (D) 8 cm

15. The radius of a cylinder is doubled but its lateral surface area is unchanged. Then its height must be-
(A) Doubled.   (B) Constant.   (C) Halved.   (D) Trippled.

1. The dimensions of a cuboid are in the ratio 3:2:2 and the lateral surface area of cuboid is 2000m^2. The outer surface of the cuboid is painted with coloured enamel at the rate of Rs 8 per m^2. Find the total cost of painting the outer surface of the cuboid.

2. The floor of a cuboidal hall has perimeter equal to 250 m and height 6m. Find the cost of painting its four walls (including doors etc) at the rate of Rs 8 per m^2.

3. Gopal sweets placed an order of making 30cm x 20cm x 6cm cardboard boxes for packing their sweets. For all overlaps, 4% of total area is required extra. If cost of the cardboard is 25p for 100 cm2, find the cost of the cardboard used for making 1000 boxes.

4. Food Corporation of India stacks bags containing wheat in the shape of cuboidal blocks in an open field on wooden platform and these blocks are covered with tarpaulin. If there be 10 blocks, each having dimensions 10m x 5m x 3m, then find the cost of the tarpaulin used to cover these blocks at the rate of Rs 12.5 per m^2. Assuming that there is negligible wastage of tarpaulin in folds.

5. The diameter of a road roller is 140cm and its length is 2.2m. It takes 400 complete revolutions to move once over to level a stretch of road 2.2m wide. Find the surface area of the stretch of road leveled in m^2. (Take π = $\frac{22}{7}$)

6. A closed cylindrical water tank is made from a plastic sheet. Its diameter is 1.4m and height 3.5m. Find

   (i) Lateral (curved) surface area of the tank.

   (ii) The actual area of the plastic sheet used if $\frac{1}{13}$ of sheet actually used was wasted in making the tank. (Take π = $\frac{22}{7}$)

7. There are 50 students in class X of a school. Class teacher asks all the students to prepare cylindrical container with a base at the bottom but open at the top, using cardboard. Each student has to make one container of radius of 4.2cm and height 11.2 cm. the class teacher will provide the cardboard to all the students. The cardboard is purchased by the teacher from the market at the rate of Rs 10 per 100 cm^2. Find the amount spent by the class teacher for the purchase of the cardboard.

8. The radius of the base of a conical tent is 12m the tent is 9m high. Find the cost of canvas required to make the tent, if one square metre of canvas costs Rs 120. (Take π = $\frac{22}{7}$)

9. A conical tent is made of tarpaulin 1.5m wide. Vertical height of the conical tent is 4m and base diameter is 6m. Find the length of the tarpaulin used, assuming that 10% extra material is required for stitching margins and wastage in cutting. (Take π = 3.14)

10. Along a highway 50conical pillars are constructed. Each pillar has base diameter 28 cm and vertical height 18cm. find the total cost of painting these pillars at the rate of Rs. 120 per m^2. (Take π = $\frac{22}{7}$)

11. The hollow sphere, in which the circus motorcyclist performs his stunts, has a diameter of 7m. Find the area available to the motorcyclist for riding. (Take π = $\frac{22}{7}$)

12. A hemispherical bowl made of brass, 0.2cm thick. The inner radius of the bowl is 4cm. find the outer curved surface area of the bowl. Also find the cost of carving its outer surface at the rate of Rs 2 per cm^2. (Take π = $\frac{22}{7}$)

13. A right circular cylinder just encloses a sphere (see figure). If the height of the cylinder is 21cm, then find the surface area of cylinder (Take π = $\frac{22}{7}$)

Class : IX   Subject : Mathematics   Assignment 7: Area of Triangles (Herons Formula)

1. The sides of a triangle are 8cm, 15cm and 17cm. find its perimeter and its area. Also find the length of the altitude drawn on the side with length 17cm.
2. The perimeter of the triangle is 44cm. if its sides are in the ratio 9:7:6 find its area.
3. The base of a right angled triangle is 5cm and hypotenuse is 13cm. Find its area.
4. Find the area of quadrilateral ABCD whose sides are 9m, 40m, 28m and 15m. The angle between the first two sides is a right angle.
5. Find the area of a trapezium whose parallel sides measure 60cm and 77cm and non-parallel sides are 25cm and 26cm.

COMPUTER

Multiple Choice Questions:

1) Which of the following technique can be used to allow only date value in cell?

(a) Data formatting

(b) Data sorting

(c) Data filtering

(d) Data validation

2) Which of the following options when selected deletes all data validation?

(a) Delete formatting

(b) Delete all

(c) Delete formula

(d) Delete me

3) We can replace multiple occurrences of a word using which of the following facilities of Cale?

(a) Find and replace

(b) By replace only

(c) By copy command

(d) By preview command

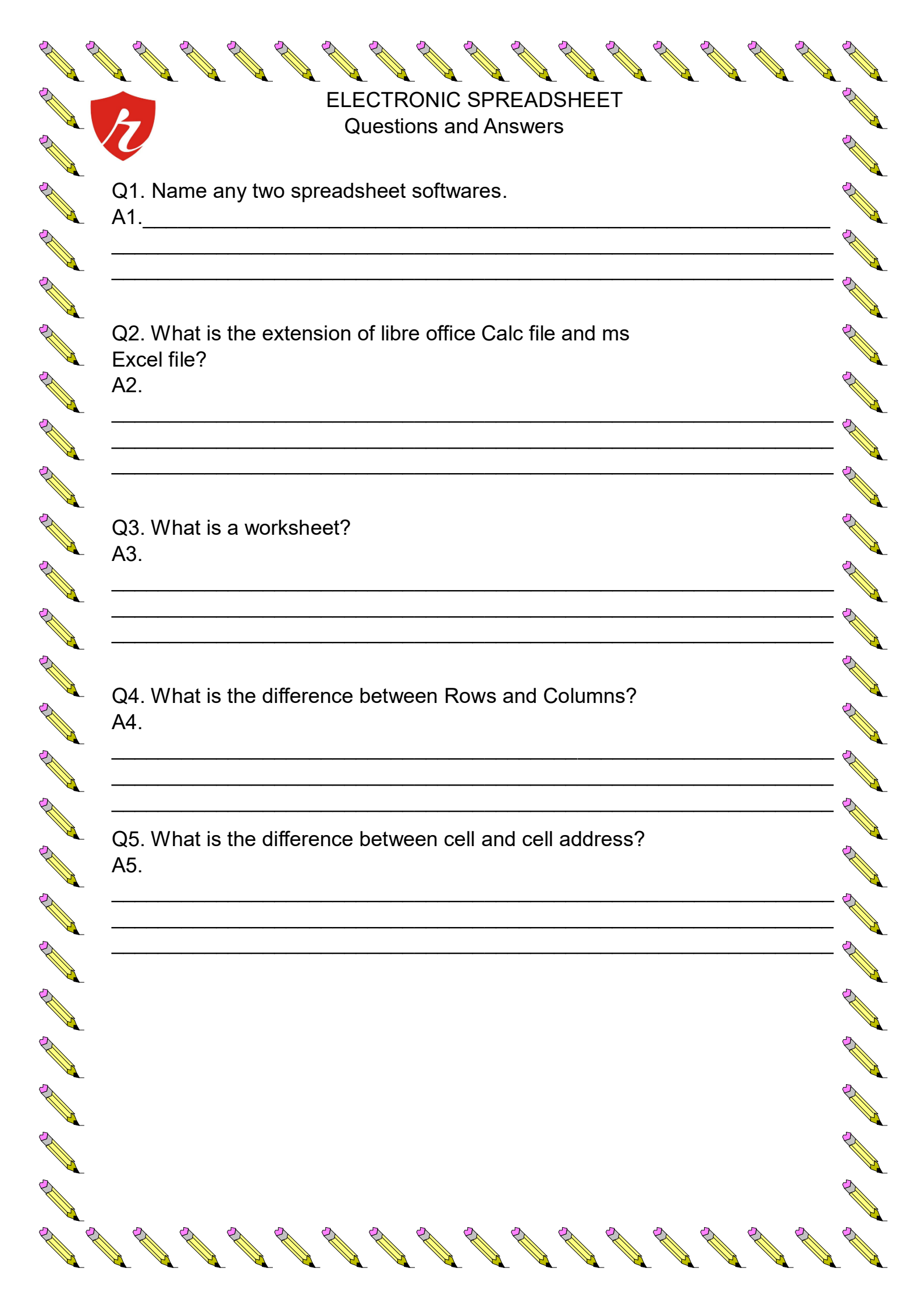4) What is the name of mechanism to arrange the data in a particular order?

(a) Sorting

(b) Searching

(c) Filtering

(d) Validating

5) What is the name of mechanism to filter out unnecessary data?

(a) Sorting

(b) Searching

(c) Filtering

(d) Validating

6) Which of the following type of package does Calc refer to?

(a) Spreadsheet

(b) Double sheet

(c) Multi-sheet

(d) Cannot determine

ELECTRONIC SPREADSHEET
Questions and Answers

Q1. Name any two spreadsheet softwares.

A1._____

_____

_____

Q2. What is the extension of libre office Calc file and ms Excel file?

A2.

_____

_____

_____

Q3. What is a worksheet?

A3.

_____

_____

_____

Q4. What is the difference between Rows and Columns?

A4.

_____

_____

_____

Q5. What is the difference between cell and cell address?

A5.

_____

_____

_____

1. निम्नलिखित काव्य पंक्तियों में निहित अलंकारों के नाम लिखिए –

(i) आए महंत बसंत।

(ii) सेवक सचिव सुमंत बुलाए।

(iii) मेघ आए बड़े बन–ठनके सँवर के।

(iv) पीपर पात सरिस मन डोला।

(v) निरपख होइके जे भजे सोई संत सुजान।

(vi) फूले फिरते हों फूल स्वयं उड़–उड़ वृंतों से वृंतों पर।

(vii) इस काले संकट सागर पर मरने को क्यों मदमाती?

(viii) या मुरली मुरलीधर की अधरान धरी अधरा न धरौंगी। मनहु रंक निधि लूटन लागी।

(ix) मरकत डिब्बे–सा खुला ग्राम।

(x) पानी गए न उबरै मोती, मानुष, चून।

(xi) सुनत जोग लागत है ऐसो ज्यों करुई ककड़ी।

(xii) हिमकर भी निराश कर चला रात भी आली।

(xiii) बसौं ब्रज गोकुल गाँव के ग्वारन ।

(xiv) ना जाने कब सुन मेरी पुकार, करें देव भवसागर पार।

(xv) कूड़ कपड़ काया का निकस्या।

(xvi) कोटिक ए कलधौत के धाम।

(xvii) तीन बेर खाती थी वे तीन बेर खाती हैं।

(xviii) हाथ फूल–सी कोमल बच्ची हुई राख की ढेरी थी।

(xix) धाए काम–धाम सब त्यागी।

(xx) बारे उजियारो करै बढे अँधेरो होय।

"मैं जिस भारतीय प्रजातंत्र की कल्पना करता हूँ उसका अध्यक्ष कोई किसान ही होगा"– गांधी जी की यह अभिलाषा देशरत्न राजेंद्र प्रसाद के स्वतंत्र भारत के प्रथम राष्ट्रपति होने पर निस्संदेह ही फलवती सिद्ध हुई। राजेंद्र प्रसाद जन्मना या कर्मणा किसान तो नहीं थे, पर किसान के सच्चे प्रतिनिधि अवश्य थे। उनमें एक गँवई (गाँव के) किसान की-सी सादगी, सरलता, निश्छलता और कर्मठता विद्यमान थी। उनमें किसान की तपस्या भी थी और वे स्वभाव और वेशभूषा से ठेठ किसान लगते थे। उन्होंने कभी स्वयं को भारत की ग्रामीण संस्कृति से अलग और विशिष्ट बनाने का प्रयत्न नहीं किया। उनके विचार, व्यवहार और वेशभूषा में भारतीयता की अमिट छाप थी।

गद्यांश पढ़कर पूछे गए प्रश्नों के उत्तर लिखिए–

प्रश्न 1 गांधी जी ने भारतीय प्रजातंत्र के अध्यक्ष के बारे में क्या कल्पना की थी?

उत्तर ....

प्रश्न 2 डॉ० राजेंद्र प्रसाद एक सच्चे किसान कैसे थे?

उत्तर ....

प्रश्न 3 डॉ० राजेंद्र प्रसाद के व्यक्तित्व में कौन-कौन से गुण थे?

उत्तर ....

प्रश्न 4 'कर्मठता' का अर्थ लिखिए।

उत्तर ....

प्रश्न 5 वाक्य रचना कीजिए।

उत्तर   सादगी ....

        स्वतंत्र ....

प्रश्न 6 गद्यांश का उचित शीर्षक लिखिए।

उत्तर ....