

1. Prepare the given banner to use as the header of school blog in GIMP with 900 pixels Width and 200 pixels Height. Insert the picture school.png from the folder Images 9 in Home as a separate layer. Type the words and give suitable colour. Give suitable background colour. Save the file in jpg format in the folder Exam 9 in Home with your Register number\_ Question number as file name.  
( File → Export is the step to export into jpg format in the new version of GIMP )



2. Prepare the given banner for an awareness programme on preservation of soil in GIMP with 7 Inch Width and 5 inch Height. Insert the pictures soil\_1.png and soil\_2.png from the folder Images 9 in Home as separate layers. Type the words and give suitable colour. Give suitable background colour. Save the file in xcf format in the folder Exam 9 in Home with your Register number\_ Question number as file name.



3. Prepare the given poster to be displayed in your school campus, in GIMP with 10 x 5 inches canvas size. Insert the picture mobile.png from the folder Images 9 in Home as a separate layer. Type the words and give suitable colour. Give suitable background colour. Save the file in jpg format in the folder Exam 9 in Home with your Register number\_ Question number as file name.  
(File → Export is the step to export into jpg format in the new version of GIMP )



4

Prepare the given poster in GIMP with 800 pixels Width and 600 pixels Height. Insert the picture kalam\_1.png from the folder Images 9 in Home as a separate layer. Type the words and give suitable colour. Give suitable background colour. Save the file in jpg format in the folder Exam 9 in Home with your Register number\_ Question number as file name.

( File → Export is the step to export into jpg format in the new version of GIMP )



5

Prepare the given badge to be worn on the International Yoga Day in GIMP with 7 x 5 inches canvas size. Insert the picture yoga.png from the folder Images 9 in Home as a separate layer. Type the words and give suitable colour. Give suitable background colour. Save the file in jpg format in the folder Exam 9 in Home with your Register number\_ Question number as file name.

( File → Export is the step to export into jpg format in the new version of GIMP )



6.

Prepare the given poster for use in relation with the programme Clean Your Surrounding in GIMP with 600 pixels Width and 800 pixels Height. Insert the pictures cleaning\_1.png and cleaning\_2.png from the folder Images 9 in Home as separate layers. Type the words and give suitable colour. Give suitable background colour. Save the file in xcf format in the folder Exam 9 in Home with your Register number\_ Question number as file name.



7. Prepare the given poster for an awareness programme on Anti Narcotic Day in GIMP with 500 pixels Width and 800 pixels Height. Insert the pictures tobacco\_1.png and tobacco\_2.jpg from the folder Images 9 in Home as separate layers. Type the words and give suitable colour. Give suitable background colour. Save the file in xcf format in the folder Exam 9 in Home with your Register number\_ Question number as file name.



8. Prepare the given card to be distributed on Mothers' Day in GIMP with 7 x 5 inches canvas size. Insert the pictures mother\_1.png and mother\_2.png from the folder Images 9 in Home as a separate layer. Type the words and give suitable colour. Give suitable background colour. Save the file in jpg format in the folder Exam 9 in Home with your Register number\_ Question number as file name.  
( File → Export is the step to export into jpg format in the new version of GIMP )



9. Prepare the given poster in GIMP with 6 inch Width and 4 inch Height. Insert the picture kalam\_2.png from the folder images 9 in Home as a separate layer. Type the words and give suitable colour. Give suitable background colour. Save the file in jpg format in the folder Exam 9 in Home with your Register number\_ Question number as file name. ( File → Export is the step to export into jpg format in the new version of GIMP )



10

Open Openoffice/Libreoffice Writer and do the following.

- Set a page as Landscape with 4cm margin in all the sides
- Type the sentence 'കേരളം ദൈവത്തിന്റെ സ്വന്തം നാട്' in your mother tongue and make it attractive by applying suitable font size and colour.
- Inert the picture kerala.jpeg from the folder Images9 in Home
- Save the file in the folder Exam 9 in Home with your Register number\_Question number as file name.

11

Open the file Bill.ots in the folder Exam\_documents in Home and do the following.

- Find out the cost of materials including tax in the column titled Amount
- Find out the total cost in the cell H13.
- Round off the total cost to zero decimal point in the cell H14 using the function ROUND.
- Save the file in the folder Exam 9 in Home with your Register number\_Question number as file name.

12

The file Weight.ots in the folder Exam\_documents in Home contains the details of students. Open the file and do the following.

- Find out the number of students with Normal Weight using the function COUNTIF in the cell 'G52'.
- Sort the table in the Ascending Order of BMI.
- Filter the details of students who are marked with Obesity.
- Freeze the row with the headings.
- Save the file in the folder Exam 9 in Home with your Register number\_Question number as file name.



13

Prepare a presentation with three slide on Organic farming. Necessary details are available in the file Organic\_Farming.ott in the folder Exam\_documents in Home.

- Include the video Organic.flv in the presentation from the folder Images 9 in Home.
- Apply suitable background colour to the slides.
- Apply suitable font size and colour to the letters.
- Save the file in the folder Exam 9 in Home with your Register number\_Question number as file name.

14

The file Selection.ots in the folder Exam\_documents in Home contains the details of the participants in the School Basket Ball Selection Trails . Open the file and do the following.

- Find out the total number of selected students using the function COUNTIF in the cell 'F52' .
- Sort the table in the Ascending Order of Height .
- Filter the details of students who are selected .
- Save the file in the folder Exam 9 in Home with your Register number\_Question number as file name.

15.

Prepare a presentation with three slide about our former president Dr.A.P.J.Abdul Kalam. Necessary details are available in the file Kalam.ott in the folder Exam\_documents in Home.

- Include suitable pictures from the folder Images 9 in Home.
- Include the video Kalam.flv in the presentation from Images 9 in Home.
- Apply suitable costume animation.
- Save the file in the folder Exam 9 in Home with your Register number\_Question number as file name.

16.

Open the file Organic\_Farming.ott from the folder Exam\_documents in Home and do the following.

- Type the title "മണ്ണിനെ കാക്കാന" (in mother tongue) and apply suitable size and colour and set at the centre of the page.
- Prepare a Character Style named New Style with colour Red and size 20pt.
- Apply this style to the sub headings in the page.
- Save the file in the folder Exam 9 in Home with your Register number\_Question number as file name.

17.

Open the file Kalam.ott from the folder Exam\_documents in Home and do the following.

- Type the title "A.P.J. ABDUL KALAM - INDIA'S PRIDE FOR EVER".
- Set the page margin as 5 cm at top and 3 cm at bottom
- Create a paragraph Style with the line spacing 1.5 and background colour yellow.
- Apply this Paragraph Style to the paragraphs in the page.
- Export the file into pdf format and save it in the folder Exam 9 in Home with your Register number\_Question number as file name.

18

The file Population.ots in the folder Exam\_documents in Home contains the details of population of 25 countries in 2014. Open the file and do the following.

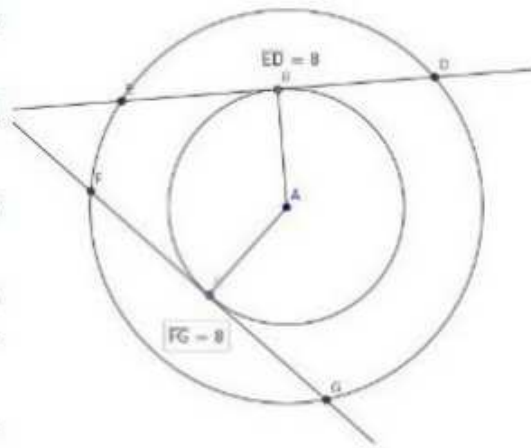
- Find out the density of population of each country in the column Density
- Round off the density of population to two decimal points in the column Density Rounded using ROUND Function
- Sort the table in the Descending Order of density.
- Save the file in the folder Exam 9 in Home with your Register number\_Question number as file name.

19

The chords with equal length are at equal distance from the centre of the circle. The construction to prove this is given below. Prepare it in GeoGebra software. Save the file in the folder Exam 9 in Home with your Register number\_ Question number as file name.

Hints :

- Draw two circle with A as centre and 3 cm and 5cm a radius. ( Tool - Circle with Centre and Radius )
- Draw the two radius AB and AC in the small circle ( Tool - Segment between Two Points)
- Draw perpendiculars to AB through B and to AC through C ( Tool - Perpendicular Line)
- Mark the intersecting points of the perpendiculars and the big circle. ( Tool - Intersect Two Objects)
- Measure the length of ED and FG ( Tool - Distance or Length. Click on the end points)



677 × 390 pixels 70.3 kB 99%

1 / 14

20.

Open GeoGebra software. Construct a regular polygon with 10 sides. Draw all the possible diagonals from one vertex. Count the triangles in the construction. Type the number as seen in the picture. Save the file in the folder Exam 9 in Home with your Register number\_ Question number as file name. ( The given picture is of a regular Octagon)

Hints :

- Draw the polygon. (Tool - Regular Polygon)
- Draw Diagonals (Tool - Segment between Two Points)
- Type the number of triangles (Tool - Insert Text)



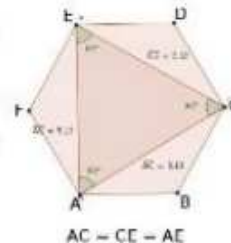
Number of Triangles = 6

21.

The triangle formed by joining the alternate vertices of a regular hexagon is an Equilateral Triangle. The construction to prove this is given below. Prepare it in GeoGebra software. Save the file in the folder Exam 9 in Home with your Register number\_ Question number as file name.

Hints:

- Draw the regular hexagon ABCDEF ( Tool - Regular Polygon)
- Draw Triangle ACE ( Tool - Polygon)
- Measure the length of sides of triangle ACE ( Tool - Distance or Length)
- Measure and mark the angles of the triangle ACE ( Tool - Angle)
- Type  $AC = CE = EA$  ( Tool- Insert Text)



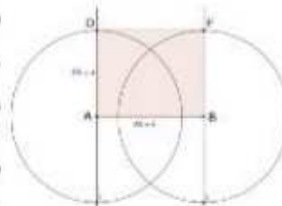
$AC = CE = AE$

22.

Given below is a GeoGebra applet to find out the area of a rectangle with 5cm length and 4cm breadth. Prepare it in GeoGebra software. Save the file in the folder Exam 9 in Home with your Register number\_ Question number as file name.

Hints :

- Draw AB ( Tool- Segment with Given Length from Point)
- Draw perpendiculars to AB through A and B ( Tool - Perpendicular Line)
- Draw two circles with A and B as centres and 4cm as radius ( Tool - Circle with Centre and Radius)
- Mark D and F ( Tool - Intersect Two Objects)
- Draw rectangle ABFD ( Tool- Polygon)

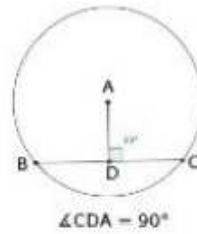


23.

The line segment which joins the midpoint of a chord of a circle and the centre of that circle is perpendicular to that chord. The construction to prove this is given below. Prepare it in GeoGebra software. Save the file in the folder Exam 9 in Home with your Register number\_Question number as file name.

Hints :

- Draw the circle with A as centre ( Tool - Circle with Centre through Point)
- Mark the points B and C in the circle ( Tool - New Point)
- Draw BC ( Tool - Segment between two points)
- Mark the midpoint of BC ( Tool - Midpoint or Centre)
- Join AD. ( Tool - Segment between Two Points)
- Measure the angle CDA and type the text.(Tool - Angle, Inset Text)

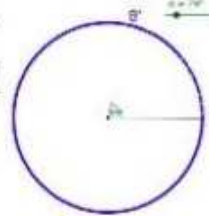


24.

All the points equidistant from a fixed point in a round plane form a circle. The construction to prove this is given below. Prepare it in GeoGebra software. Save the file in the folder Exam 9 in Home with your Register number\_Question number as file name.

Hint :

- Draw AB (Tool - Segment between Two Points)
- Create an Angle slider (Tool - Slider)
- Draw the angle A. Set the name of slider as the measurement of angle. ( Tool - Angle with Given size)
- Apply the option Trace on to B'.
- Apply animation to the slider.

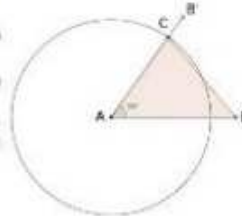


25.

Construct the triangle ABC in GeoGebra software.  $\angle A = 55^\circ$ ,  $AC = 4\text{cm}$ . Save the file in the folder Exam 9 in Home with your Register number\_Question number as file name.

Hints :

- Draw AB using the tool - Segment with Given Length from Point
- Mark  $\angle A$  ( Tool - Angle) with Given size)
- Mark C in AB' as  $AC = 4\text{cm}$  (Tool - Circle with Centre and Radius, Intersect Two Objects)
- Draw  $\triangle ABC$  (Tool - Polygon)

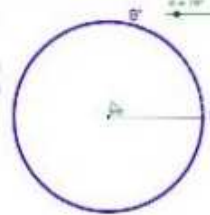


26.

All the points equidistant from a fixed point in a round plane form a circle. The construction to prove this is given below. Prepare it in GeoGebra software. Save the file in the folder Exam 9 in Home with your Register number\_Question number as file name.

Hint :

- Draw AB (Tool - Segment between Two Points)
- Create an Angle slider (Tool - Slider)
- Draw the angle A. Set the name of slider as the measurement of angle. ( Tool - Angle with Given size)
- Apply the option Trace on to B'.
- Apply animation to the slider.



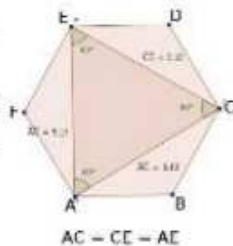


27

The triangle formed by joining the alternate vertices of a regular hexagon is an Equilateral Triangle. The construction to prove this is given below. Prepare it in GeoGebra software. Save the file in the folder Exam 9 in Home with your Register number\_ Question number as file name.

Hints:

- Draw the regular hexagon ABCDEF ( Tool - Regular Polygon)
- Draw Triangle ACE ( Tool - Polygon)
- Measure the length of sides of triangle ACE ( Tool - Distance or Length)
- Measure and mark the angles of the triangle ACE ( Tool - Angle)
- Type  $AC = CE = EA$  ( Tool- Insert Text)

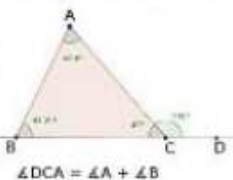


28

The measurement of one outer angle of a triangle is equal to the sum of the other two inner angles. The construction to prove this is given below. Prepare it in GeoGebra software. Save the file in the folder Exam 9 in Home with your Register number\_ Question number as file name.

Hints :

- Draw the triangle ABC ( Tool - Polygon)
- Draw a line that passes through B and C ( Tool - Line through Two Points)
- Mark the point D in the line. ( Tool - New Point)
- Measure the angle DCA and other angles of the triangle. ( Tool - Angle)
- Type  $\angle DCA = \angle A + \angle B$  ( Tool - Insert Text)

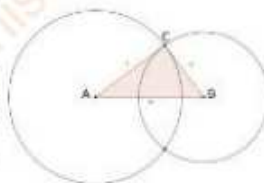


29

Construct the triangle ABC in GeoGebra software.  $AB=5\text{cm}$ ,  $BC=3\text{cm}$ ,  $AC=4\text{cm}$ . Save the file in the folder Exam 9 in Home with your Register number\_ Question number as file name.

Hints :

- Draw AB ( Tool- Segment with a Given Length from Point)
- Draw circles with 4cm radius in A and 3cm in B ( Tool - Circle with Centre and Radius)
- Mark C ( Tool- Intersect Two Objects)
- Draw triangle ( Tool - Polygon)

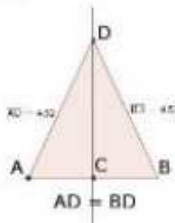


30.

A triangle which includes a point in the perpendicular bisector of a line segment and the end points of that line segment is an isosceles triangle. The construction to prove this is given below. Prepare it in GeoGebra software. Save the file in the folder Exam 9 in Home with your Register number\_ Question number as file name.

Hints:

- Draw AB ( Tool - Segment between Two Points)
- Mark C, the midpoint of AB ( Tool - Midpoint or Center)
- Draw a perpendicular to AB through C ( Tool - Perpendicular Line)
- Draw triangle ABD ( Tool - Polygon)
- Measure the length of AD and BD ( Tool - Distance or Length)
- Using Text tool type  $AD = BD$ .

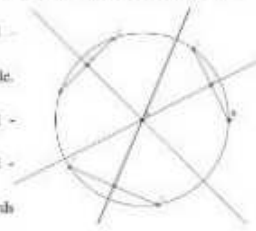


31.

The perpendicular bisectors of all the chords of a circle pass through the centre. The construction to prove this is given below. Prepare it in GeoGebra software. Save the file in the folder Exam 9 in Home with your Register number\_ Question number as file name.

Hint:

- Draw the circle with A as centre. ( Tool - Circle with Centre Through Point )
- Mark the points C, D, E, F and G in the circle. ( Tool - New Point )
- Draw the chords BC, DE and FG ( Tool - Segment between Two Points )
- Mark the midpoints of each chord ( Tool - Midpoint or Center )
- Draw the perpendicular bisector of chords ( Tool - Perpendicular Line )



32. Prepare a web page about International Yoga Day. Give "INTERNATIONAL YOGA DAY" as title. Apply suitable background colour. Give proper font size and colour. Include necessary details from the file yoga.ott from the folder Exam\_documents in Home. Inert the pictures yoga\_logo.jpeg and yoga.jpg from the folder Images 9 in Home. Save the file in the folder Exam9 in Home with your Register number\_ Question number as file name.

33. The web page created by the Science Club of Anchalumood High School in relation with the International Year of Light is given below. Prepare a web page for your school like this. Insert suitable pictures from the folder Image 9 in Home. Give movement to the name of school. Save the file in the folder Exam 9 in Home with your Register number\_ Question number as file name.



34.

Prepare a web page on our famous writer M.T Vasudevan Nair. Give "Madathil Thekkeppattu Vasudevan Nair" as Heading. Apply suitable background colour, font size and colour. Insert the pictures mt\_1.jpeg and mt\_2.jpg from the folder Images 9 in Home. Give the web page the title 'WINNER OF JNANPITH'. Save the file in the folder Exam9 in Home with your Register number\_ Question number as file name.

35.

Prepare a web page on the famous poet and lyricist Yusufali Kecheri. Necessary details are available in the file kecheri.ott in the folder Exam\_documents in Home. Insert the picture kecheri.png from the folder Images 9 in Home. Give the title Yusufali Kecheri to the web page. Save the file in the folder Exam 9 in Home with your Register number\_ Question number as file name.



36.

Open the software PhEt and Pendulum Lab. Set the length of the pendulum as 2 m and mass as 2 kg. Find out the time taken for 5 oscillations. Change the mass to 2.5 kg and then to 3 kg and find out the time taken for 5 oscillations with each mass. Open the file Phet.ots from the folder Exam\_documents in Home. Complete the table using the data you got from pendulum lab experiment. Save the file in the folder Exam 9 in Home with your Register number\_ Question number as file name.

37.

Open the software PhEt and Pendulum Lab. Set the length of the pendulum as 1.5 m and mass as 2kg. Find out the time taken for 10, 15 and 20 oscillations. Open the file Oscillations.ots from the folder Exam\_documents in Home. Complete the table using the data you got from pendulum lab experiment. Save the file in the folder Exam 9 in Home with your Register number\_ Question number as file name.

38.

Open the software Kalzium. Compare the atomic radius of the elements with Atomic number 31 to 50 using the option Plot Data. Display the names of elements. Take Screen shot of this using the print screen key on the key board and save it in the folder Exam 9 in Home with your Register number\_ Question number as file name.

39.

Open the software Kalzium. Find out the Atomic Number and Number of Electrons of the elements in 12 Period. Open the file Periods.ots from the folder Exam\_documents in Home. Enter the details that you found out from Kalzium in the table. Save the file in the folder Exam 9 in Home with your Register number\_ Question number as file name.

40.

Open the table named family.ots from the folder Exam\_documents in Home. Complete the table with the help of the software Periodic table of the Elements. Save the file in the folder Exam 9 in Home with your Register number\_Question number as file name.

41.

Open the software Kalzium. Find out the Atomic Number and Number of Outer shell Electrons of the elements in Group 13. Open the file Groups.ots from the folder Exam\_documents in Home. Enter the details that you found out from Kalzium in the table. Save the file in the folder Exam 9 in Home with your Register number\_Question number as file name.