

**DELHI PUBLIC SCHOOL GAYA** 

(Under the aegis of the Delhi Public School Society, New Delhi) Affiliated to C.B.S.E, New Delhi Affiliation No.330530, School Code – 65572

#### DURGA PUJA HOLIDAY ASSIGNMENT CLASS-X (ACADEMIC SESSION: 2024-25)

## Are you looking for some interesting fun learning assignment to make your learning session interesting and engaging? Here in this assignment, you will find some very interesting and engaging tasks that will be fun solving.

# ENGLISH LANGUAGE AND LITERATURE (184) 1. How is the acceptance of loss important in your life? Discuss with the reference to The Ball Poem and Sermon at Benares. The students are advised to watch Christopher Nolan's "Interstellar" and depict the existential crisis of the protagonist of the movie and connect with the topic. 2. 'Women are always relegated to the shadows of patriarchy'- There is a conversation between Bholi and Valli. Write down the dialogue between these two characters and there will be the reference to the predicament of the lonely wife of Satyajit Ray's "The Lonely Wife" 3. Which is more relatable to you- The wisdom of Mandela or the angst of the captive tiger? Discuss.

### अपने अभिभावकों से कुछ लोक-कथाओं को सुनिए और उनमें से किसी एक कथा को लगभग 100 शब्दों में लिखिए तथा उस लोक-कथा पर आधारित निम्नलिखित प्रश्नों के उत्तर लिखिए:-(क) आपने जो लोक-कथा सुनी, उसमें मुख्य पात्र कौन था और उसने क्या महत्वपूर्ण कार्य किया? (ख) इस कथा का नैतिक सन्देश क्या है? इसे आप अपने जीवन से कैसे जोड़ सकते हैं? दुर्गा-पूजा महोत्सव 2024 के विज्ञापन की थीम: ''शक्ति और शांति का संगम'' को ध्यान में रखकर माँ दुर्गा की शक्ति और शांति के अद्वितीय मेल का उल्लेख करते हुए एक आकर्षक विज्ञापन तैयार कीजिए। 'नैतिकता और जीवन मूल्य' विषय पर आधारित निम्नलिखित में से किसी एक गुण के आधार पर लगभग 100 शब्दों में लघुकथा लिखिए।

- (क) ईमानदारी: लघुकथा में ईमानदारी का फल मिलने का उल्लेख।
- (ख) दया और करुणाः लघुकथा में करुणा और दूसरों की मदद करने से मिलने वाले संतोष का उल्लेख।
- (ग) आत्मविश्वास: लघुकथा में आत्मविश्वास के बल पर व्यक्ति के कठिनाइयों को पार कर सफल होने का उल्लेख।

#### SANSKRIT (122)

कस्मात् अपि अध्यायात् दश पदानां सन्धिं/सन्धिविच्छेदं कुरुत तथा च दश प्रत्यययुक्तानि पदानि लिखित्वा पदं प्रत्ययं च विच्छेदं कुरुत।

#### **MATHEMATICS (041)** $(1+\sin\theta)^2 + (1-\sin\theta)^2 \quad 1+\sin^2\theta$

1. 
$$\frac{1}{2\cos^2\theta} = \frac{1}{1-\sin^2\theta}$$

2. 
$$\frac{\tan\theta}{1-\cot\theta} + \frac{\cot\theta}{1-\tan\theta} = 1 + \tan\theta + \cot\theta$$

3. 
$$\sqrt{\frac{(1-\cos A)}{(1+\cos A)}} + \sqrt{\frac{(1+\cos A)}{(1-\cos A)}} = 2\cos ec A$$

- 4.  $\frac{\sec\theta 1}{\sec\theta + 1} = \left(\frac{\sin\theta}{1 + \cos\theta}\right)^2$
- 5. If  $\tan \theta = \frac{1}{\sqrt{2}}$ , find the value of  $\frac{\csc^2\theta \sec^2\theta}{\csc^2\theta + \cot^2\theta}$ .
- 6. A tower stands vertically on the ground. From a point on the ground, 20 m away from the foot of the tower, the angle of elevation of the top the tower is 60°. What is the height of the tower?
- 7. A vertical tower stands on a horizontal place and is surmounted by a vertical flag staff. At a point on the plane 70 meters away from the tower, an observer notices that the angles of elevation of the top and bottom of the flag-staff are respectively 60° and 45°. Find the height of the flag staff and that of the tower.
- 8. A person observed the angle of elevation of a tower as 30°. He walked 50 m towards the foot of the tower along level ground and found the angle of elevation of the top of the tower as 60°. Find the height of the tower.
- 9. On the same side of a tower, two objects are located. When observed from the top of the tower, their angles of depression are 45° and 60°. If the height of the tower is 150 m, find the distance between the objects.
- 10. The angle of elevation of the top of the building from the foot of the tower is 30° and the angle of elevation of the top of the tower from the foot of the building is 60°. If the tower is 50 m high, find the height of the building.

#### SCIENCE (086)

#### PHYSICS

#### Complete the following Practicals in the Practical File

- 1. Determination of the focal length of Concave mirror
- 2. Determination of the focal length of Convex lens
- 3. Tracing the path of a ray of light passing through a rectangular glass slab for different angles of incidence. Measure the angle of incidence, angle of refraction, angle of emergence and interpret the result.
- 4. Tracing the path of the rays of light through a glass prism

#### CHEMISTRY

#### Complete the following Practicals in the Practical File

1. Performing and observing the following reactions and classifying them into:

- Combination reaction (a)
- (b) Decomposition reaction
- **Displacement** reaction (c
- (d) Double displacement reaction
  - Action of water on quicklime (i)
  - (ii) Action of heat on ferrous sulphate crystals
  - (iii) Iron nails kept in copper sulphate solution
- Performing and observing the following reactions and classifying them into: 2.
  - Combination reaction (a)
  - Decomposition reaction (b)
  - (c) Displacement reaction
  - Double displacement reaction (d)
  - Reaction between sodium sulphate and barium chloride solution. (e)
- Finding the pH of the following samples by using pH paper/universal indicator: Dilute 3. (a) Hydrochloric Acid, Dilute NaOH solution, Dilute Ethanoic Acid solution, Lemon juice, Water, Dilute Hydrogen Carbonate solution
  - Studying the properties of acids and bases (HCl & NaOH) on the basis of their reaction with: (b)
    - Litmus solution (Blue/Red) (i) FFOR
    - (ii) Zinc metal
    - (iii) Solid sodium carbonate
- Observing the action of Zn, Fe, Cu and Al metals on the following salt solutions: 4.
  - (a)  $ZnSO_4(aq)$
  - (b)  $FeSO_4(aq)$
  - (c)  $CuSO_4(aq)$
  - (d)  $Al_2(SO_4)_3$
- Arranging Zn, Fe, Cu and Al (metals) in the decreasing order of reactivity based on the above result. 5.

#### **BIOLOGY**

#### **Complete the following Practicals in the Practical File**

- Prepare a temporary mount of a leaf peel to show stomata. 1. Studying (a) binary fission in Amoeba, and (b) budding in yeast and Hydra with the help of prepared slides.
- 2. Identification of the different parts of an embryo of a dicot seed (Pea, gram or red kidney bean).
- Experimentally show that carbon dioxide is given out during respiration. 3.
- Demonstrate phototropism in plants? 4.
- Demonstrate importance of carbon dioxide in photosynthesis? 5.

#### **SOCIAL SCIENCE (087)**

Project Topic: The Role of Roadways, Waterways and Airways in Post-World War II- World and India. 1. Topics to be combined are:

History – Making of Global World (Subtopics 2 to 4.4 -The nineteenth century (1815-1914) to end of Bretton Woods & the beginning of "Globalization")

**Geography** – Life Lines of National Economy

**Economics** – Globalisation and the Indian Economy (Production across the countries, Chinese toys in India, World Trade Organization, The Struggle for a Fair Globalization)

(Analyse the implication of globalization for local economies. Discuss how globalization is experienced differently by different social groups. Enumerates how the transportation works as a lifeline of economy. Analyse and infer the impact of roadways and railways on the national economy. Analyses and infers the challenges faced by the roadways and railway sector in India. Integrate various dimensions of globalisation in terms of cultural / political/ social /economical aspects). Appraise the evolution of Globalisation and the global trends. Investigate the factors that facilitated the growth on MNC 's) *Note: Kindly paste relevant pictures (2 or 3) in your project file.* 

#### **COMPUTER APPLICATIONS (165)**

1. ABC Web Inc has hired you as its website developer. You have to design a web page in HTML for the online job fair. Write an HTML code for the following form. Use an appropriate background colour for the web page.

JOB INT	ERVIEV	W FOR	M		
Name:					
Password:					
Gender:					
<ul> <li>Male</li> </ul>					
○ Female					
Country: India V					
Bio: USA UK					
UK					
	_		1		
HTML ^					
CSS JavaScript					
Skills: Python 🗸					
Save Reset					
				<u>X</u>	
	*******		SC		
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