



# D.A.V. Police Public School

(Under the direct control of D.A.V. College Managing Committee, New Delhi)  
Affiliated to CBSE New Delhi: 532059 (to be upgraded up to Senior Secondary)

Police Lines, Narnaul-123001 (Haryana)

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Dear Students,

As the festival of lights approaches, we extend our warmest wishes to you and your families for a joyous and prosperous Diwali. May this Diwali bring new light into your lives, illuminating your hearts with happiness, health, and success.

Let us celebrate this Diwali by spreading joy and kindness, embracing the spirit of togetherness, and sharing the festive cheer with everyone around us. Remember to stay safe and make the most of this beautiful festival with your loved ones.

Happy Diwali!

Please note the following points-

- There will be holiday from 30<sup>th</sup> October to 3<sup>rd</sup> November 2024 on account of Diwali.
- School Timings from 4<sup>th</sup> November 2024 will be 8:50a.m. to 2:50 p.m.
- Parents are requested to submit pending dues.
- Please find the attachment.

## P.T-3 DATESHEET

Date	III	IV	V	VI	VII	VIII	IX	X
06-11-2024 Wednesday	-----	-----	Maths	English	Hindi	S.Sc.	Science	Maths
08-11-2024 Friday	Hindi	English	Skt.	S.Sc.	Science	Hindi	English	Computer/Music
11-11-2024 Monday	English	G.Sc	Hindi	Maths	Skt.	Science	Maths	English
13-11-2024 Wednesday	G.Sc.	Maths	S.Sc.	Skt.	S.Sc	Maths	Hindi	Science
16-11-2024 Friday	Maths	S.Sc.	G.Sc.	Hindi	English	Skt.	Computer	S.Sc.
18-11-2024 Monday	S.Sc.	Hindi	English	Science	Maths	English	S.Sc.	Hindi

**P.T-3 SYLLABUS**

<p><b>HINDI</b>  पुस्तक क्षितिज, कृतिका ( भाग-2)  क्षितिज- पाठ-4.उत्साह, अट नहीं रही है  पाठ- 5. यह दंतुरित मुस्कान  पाठ 10. एक कहानी यह भी  पाठ-11. नौबतखाने में इबादत  कृतिका- पाठ- 2.साना- साना हाथ जोड़ि  व्याकरण- वाक्य भेद, वाच्य  रचनात्मक लेखन- अनुच्छेद, पत्र लेखन,  स्ववृत्त  पठित और अपठित गद्यांश और काव्यांश</p>	<p><b>ENGLISH:</b>  Chapter 6: Mijbil the Otter,  Poem:Fog by Carl Sandburg  Chapter 7: Madam Rides the Bus  The Tale of Custard the Dragon by  Ogden Nash  Supplementary Reader  Ch.6 The Making of a Scientist  Ch.7 The Necklace</p>	<p><b>MATHS</b>  Chapter 11 Areas Related to Circles  Chapter 12 Surface Areas and Volumes  Chapter 13 Statistics  Chapter 14 Probability</p>
<p><b>SCIENCE</b>  Chapter 07: How do organisms  reproduce  Chapter 10-Human eye  Chapter-12-Magnetic effect of electric  current</p>	<p><b>SOCIAL SCIENCE</b>  Chapter 4 Political parties,  chapter 5 Outcomes of democracy ,  Map skill</p>	<p><b>Computer Application</b>  Complete HTML  (Chapter -3,Chapter-4 ,Chapter -5)</p>

**Subject-Maths**

**SECTION A**

*Question numbers 1 to 6 carry 2 marks each.*

1. (a) Find the sum of first 30 terms of AP :  $- 30, - 24, - 18, \dots$  . 2

**OR**

- (b) In an AP if  $S_n = n(4n + 1)$ , then find the AP. 2

2. A solid metallic sphere of radius 10.5 cm is melted and recast into a number of smaller cones, each of radius 3.5 cm and height 3 cm. Find the number of cones so formed. 2

3. (a) Find the value of m for which the quadratic equation  
 $(m - 1)x^2 + 2(m - 1)x + 1 = 0$   
has two real and equal roots. 2

**OR**

- (b) Solve the following quadratic equation for x : 2  
 $\sqrt{3}x^2 + 10x + 7\sqrt{3} = 0$

4. Find the mode of the following frequency distribution : 2

<i>Class</i>	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60
<i>Frequency</i>	15	10	12	17	4

5. The product of Rehan's age (in years) 5 years ago and his age 7 years from now, is one more than twice his present age. Find his present age. 2
6. Two concentric circles are of radii 4 cm and 3 cm. Find the length of the chord of the larger circle which touches the smaller circle. 2

### SECTION B

Question numbers 7 to 10 carry 3 marks each.

7. For what value of  $x$ , is the median of the following frequency distribution 34.5? 3

<i>Class</i>	<i>Frequency</i>
0 – 10	3
10 – 20	5
20 – 30	11
30 – 40	10
40 – 50	$x$
50 – 60	3
60 – 70	2

8. Draw a circle of radius 3 cm. Take two points P and Q on one of its extended diameter each at a distance of 7 cm from its centre. Construct tangents to the circle from these two points P and Q. 3
9. (a) The angle of elevation of the top of a building from the foot of the tower is  $30^\circ$  and the angle of elevation of the top of the tower from the foot of the building is  $60^\circ$ . If the tower is 50 m high, then find the height of the building. 3

**OR**

- (b) From a point on a bridge across a river, the angles of depression of the banks on opposite sides of the river are  $30^\circ$  and  $45^\circ$  respectively. If the bridge is at a height of 3 m from the banks, then find the width of the river. 3
10. Following is the daily expenditure on lunch by 30 employees of a company :

<i>Daily Expenditure (in Rupees)</i>	<i>Number of Employees</i>
100 – 120	8
120 – 140	3
140 – 160	8
160 – 180	6
180 – 200	5

Find the mean daily expenditure of the employees. 3

### SECTION C

Question numbers 11 to 14 carry 4 marks each.

11. (a) From a solid cylinder of height 30 cm and radius 7 cm, a conical cavity of height 24 cm and same radius is hollowed out. Find the total surface area of the remaining solid. 4

**OR**

- (b) Water in a canal, 8 m wide and 6 m deep, is flowing with a speed of 12 km/hour. How much area will it irrigate in one hour, if 0.05 m of standing water is required? 4

12. In Figure 1, a triangle ABC with  $\angle B = 90^\circ$  is shown. Taking AB as diameter, a circle has been drawn intersecting AC at point P. Prove that the tangent drawn at point P bisects BC.

4

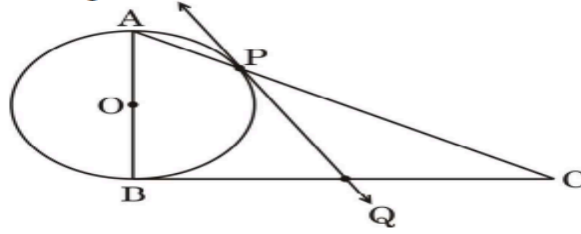


Figure 1

### Case Study – 1

13. In Mathematics, relations can be expressed in various ways. The matchstick patterns are based on linear relations. Different strategies can be used to calculate the number of matchsticks used in different figures.

One such pattern is shown below. Observe the pattern and answer the following questions using Arithmetic Progression :

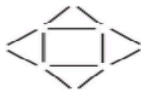


Figure 1



Figure 2



Figure 3

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- (a) Write the AP for the number of triangles used in the figures. Also, write the  $n^{\text{th}}$  term of this AP. 2
- (b) Which figure has 61 matchsticks? 2

### Case Study – 2

14. Gadisar Lake is located in the Jaisalmer district of Rajasthan. It was built by the King of Jaisalmer and rebuilt by Gadsji Singh in 14<sup>th</sup> century. The lake has many Chhatris. One of them is shown below :



Observe the picture. From a point A  $h$  m above from water level, the angle of elevation of top of Chhatri (point B) is  $45^\circ$  and angle of depression of its reflection in water (point C) is  $60^\circ$ . If the height of Chhatri above water level is (approximately) 10 m, then

- (a) draw a well-labelled figure based on the above information; 2
- (b) find the height ( $h$ ) of the point A above water level. 2  
(Use  $\sqrt{3} = 1.73$ )

खंड-क( अपठित बोध)

1. निम्नलिखित अपठित गद्यांश को पढ़कर नीचे पूछे गये प्रश्नों के उत्तर दीजिए-  
जिस देश को कभी सोने की चिड़िया कहा जाता था, जहाँ कभी दूध की नदियाँ बहा करती थीं, वहाँ आज असंख्य लोगों को रहने के लिए घर, तन ढकने के लिए वस्त्र और खाने के लिए भोजन भी नहीं मिल पाता। इसका एकमात्र कारण है-जनसंख्या की अत्यधिक वृद्धि। यद्यपि जनसंख्या किसी राज्य का प्रमुख तत्व है, उसके बिना किसी राज्य एवं जाति की कल्पना नहीं की जा सकती, किंतु 'अति सर्वत्र वर्जयेत्।' भारतवर्ष में जनसंख्या की अत्यधिक वृद्धि के कुछ विशेष कारण हैं, जिसमें बाल-विवाह, बहु-विवाह, अशिक्षा, रूढ़िवादिता, ग्रामीण क्षेत्रों में परिवार नियोजन के नवीनतम साधनों का कम प्रचार व अनभिज्ञता, पुत्र की अनिवार्यता आदि शामिल हैं। जनसंख्या वृद्धि के कारण भारत में सर्वत्र अशिक्षा, गरीबी, बेरोजगारी, निम्न जीवन-स्तर, अस्वस्थता, खाद्यान्न संकट आदि अनेक समस्याएँ निरंतर बढ़ रही हैं। जनसंख्या का यह विस्फोट भारत के लिए अभिशाप बन गया है। प्रसिद्ध अर्थशास्त्री माल्थस का विचार है कि "जनसंख्या की वृद्धि ज्यामितीय गति से होती है, जबकि उत्पादन अंकगणितीय गति से।" प्रथम पंचवर्षीय योजना में परिवार नियोजन कार्यक्रम केवल शहरी अस्पतालों तक ही सीमित रहा। द्वितीय पंचवर्षीय योजना में इन कार्यक्रमों को गाँव तक पहुँचाने की चेष्टा की गई।  
(क) कथन पढ़कर सही विकल्प का चयन कीजिए। आज भारत में बहुत से लोगों को घर, वस्त्र और भोजन की आपूर्ति नहीं हो पाती, क्योंकि

- i) जनसंख्या वृद्धि अत्यंत तीव्र गति से हो रही है, जबकि उत्पादन बहुत ही कम मात्रा में हो रहा है।  
ii) जनसंख्या वृद्धि ज्यामितीय गति से, जबकि उत्पादन अंकगणितीय गति से वृद्धि करता है।  
iii) नवीनतम साधन अनुपलब्ध हैं।  
iv) जनसंख्या वृद्धि अंकगणितीय गति से तथा उत्पादन ज्यामितीय गति से वृद्धि करता है।

कट

- (i) केवल कथन 1 सही है। (ii) केवल कथन 3 सही है।  
(iii) कथन 2 और 4 सही हैं। (iv) कथन 1 और 3 सही हैं।  
(ख) गद्यांश के आधार पर 'अति सर्वत्र वर्जयेत्' का अर्थ बताइए।  
(i) किसी भी कार्य में अति नहीं होनी चाहिए (ii) जनसंख्या वृद्धि नहीं होनी चाहिए  
(iii) बहु-विवाह पर रोक होनी चाहिए (iv) उपर्युक्त में से कोई नहीं  
(ग) प्रथम पंचवर्षीय योजना के अनुसार परिवार नियोजन कार्यक्रम को क्या स्थिति थी?

2. निम्नलिखित पद्यांश पर आधारित प्रश्नों के उत्तर दीजिए।

हे ग्राम देवता ! नमस्कार । सोने-चाँदी से नहीं, किंतु तुमने मिट्टी से किया प्यार। हे ग्राम देवता ! नमस्कार !

जन कोलाहल से दूर कहीं एकाकी सिमटा-सा निवास,  
रवि-शशि का उतना नहीं कि जितना प्राणों का होता प्रकाश,  
श्रम, वैभव के बल पर करते हो जड़ से चेतन का विकास,  
दानों-दानों में फूट रहे सौ-सौ दानों के हरे हास,  
यह है न पसीने की धारा, यह गंगा की है धवल धार,  
हे ग्राम देवता ! नमस्कार !

अधखुले अंग जिनमें केवल, हैं कसे हुए कुछ अस्थि-खंड  
जिनमें दधीचि की हड्डी है, यह वज्र इंद्र का है प्रचंड।  
जो है गतिशील सभी ऋतु में गर्मी वर्षा हो या कि ठंड,  
जग को देते हो पुरस्कार देकर अपने को कठिन दंड।  
झोंपड़ी झुकाकर तुम अपनी ऊँचे करते हो राज-द्वार!,  
हे ग्राम देवता ! नमस्कार !

(क) प्रस्तुत काव्यांश के आधार पर बताइए कि कवि ने ग्राम-देवता किसे कहा है?

- (i) गाँवों के देवता को (ii) किसान को (iii) गाँव के लोगों को (iv) ईश्वर को  
(ख) प्रस्तुत काव्यांश निम्न में से किससे संबंधित है?  
(i) ग्रामीण परिवेश से (ii) गाँव की झोंपड़ियाँ से (iii) किसान से (iv) इनमें से कोई नहीं  
(ग) ग्राम देवता कहाँ निवास करते हैं?

खंड (ख) : व्यावहारिक व्याकरण

3. निर्देशानुसार 'रचना के आधार पर वाक्य भेद' पर आधारित प्रश्नों के उत्तर दीजिए।

(क) तुम घर गए और वह रोने लगी।' इस वाक्य को सरल वाक्य में परिवर्तित कीजिए।

(ख) 'वै बोलते जा रहे थे और पिताजी का चेहरा गर्व से बदलता जा रहा था।' रचना के आधार पर वाक्य का भेद बताइए।

(ग) 'घंटी बजी, छात्र पुस्तकें लेकर कक्षा से बाहर निकले। छात्र घर चले गए।' इस वाक्य का संयुक्त वाक्य क्या बनेगा?

4. निर्देशानुसार 'वाच्य' पर आधारित प्रश्नों के उत्तर दीजिए।

(क) 'उसके द्वारा उछलकर पतंग पकड़ ली गई।' इस वाक्य का कर्तृवाच्य क्या होगा?

(ख) कर्तृवाच्य में क्रिया का संबंध किससे होता है?

(ग) भाववाच्य किसे कहते हैं?

खंड-ग(पाठ्यपुस्तक व पूरक पाठ्यपुस्तक)

5. वैदिक इतिहास में शहनाई का कोई उल्लेख नहीं मिलता। इसे संगीत • शास्त्रांतर्गत 'सुषिर-वाद्यों' में गिना जाता है। अरब देश में फूँककर बजाए जाने वाले वाद्य जिसमें नाड़ी (नरकट या रीड) होती है, को 'नय' बोलते हैं। शहनाई को 'शाहेनय' अर्थात् 'सुषिर वाद्यों में शाह' की उपाधि दी गई है। सोलहवीं शताब्दी के उत्तरार्ध में तानसेन द्वारा रची बंदिश, जो संगीत राग कल्पद्रुम से प्राप्त होती है, में शहनाई, मुरली, वंशी, श्रृंगी एवं मुरछंग आदि का वर्णन आया है। अवधी पारंपरिक लोकगीतों एवं चैती में शहनाई का उल्लेख बार-बार मिलता है। मंगल का परिवेश प्रतिष्ठित करने वाला यह वाद्य इन जगहों पर मांगलिक विधि-विधानों के अवसर पर ही प्रयुक्त हुआ है। दक्षिण भारत के मंगल वाद्य 'नागस्वरम्' की तरह शहनाई, प्रभाती की मंगलध्वनि का संपूर्ण है।

(क) 'सुषिर-वाद्यों' से क्या तात्पर्य है?

- (i) जो वाद्य देखने में सुंदर हो (ii) जो मधुर ध्वनि उत्पन्न करते हो  
(iii) जो फूँक कर बजाए जाने वाले हो (iv) जो तबले के समान बजाए जाने वाले हो

(ख) शहनाई का उल्लेख कहाँ मिलता है?

- (i) तानसेन द्वारा रची गई बंदिश (ii) मुरली, वंशी, श्रृंगी के साथ  
(iii) पारंपरिक लोकगीतों में (iv) उपर्युक्त सभी

प्रश्न-6. गद्य पाठों के आधार पर निम्नलिखित प्रश्नों के उत्तर 25-30 शब्दों में दीजिए-

- (क) गिरती आर्थिक दशा ने मन्नु भंडारी के पिता के व्यक्तित्व पर क्या प्रभाव डाला?  
 (ख) सुषर वाद्यों से क्या अभिप्राय है? शहनाई को 'सुसिर वाद्यों मेंशाह' की उपाधि क्यों दी गई है?  
 7. निम्नलिखित पठित पद्यांश पर आधारित बहुविकल्पीय प्रश्नों के सर्वाधिक उपयुक्त विकल्प चुनकर लिखिए।

तुम्हारी यह दंतुरित मुस्कान  
 मृतक में भी डाल देगी जान  
 धूलि-धूसर तुम्हारे ये गात...  
 छोड़कर तालाब मेरी झोंपड़ी में खिल रहे जलजात  
 परस पाकर तुम्हारा ही प्राण,  
 पिघलकर जल बन गया होगा कठिन पाषाण  
 छू गया तुमसे कि झरने लग पड़े शफालिका के फूल  
 बास था कि बबल?

- (क) काव्यांश के आधार पर बताइए कि बच्चे की मुस्कान किसे पिघलाने में समर्थ है?  
 (i) कठोर पत्थर को (ii) पहाड़ को (iii) कठोर व्यक्ति के मन को (iv) संपूर्ण वातावरण को  
 (ख) झोंपड़ी में कमल खिलने का क्या तात्पर्य है?  
 (i) झोंपड़ी का सुगंधित वातावरण (ii) गरीबी में भी आनंद की अनुभूति  
 (iii) आर्थिक संपन्नता  
 (iv) झोंपड़ी में कमल के फूलों की सजावट

8. पद्य पाठों के आधार पर निम्नलिखित प्रश्नों के उत्तर लगभग 25-30 शब्दों में दीजिए-

- (क) नए-नए निकले हुए दाँतों वाले बच्चे की मुस्कान देखकर कवि को क्या लगता है?  
 (ख) 'अट नहीं रही है' कविता में कवि ने किस ऋतु का वर्णन किया है? अपने शब्दों में लिखिए।  
 9. पूरक पाठ्यपुस्तक 'कृतिका' के पाठों पर आधारित निम्नलिखित प्रश्नों के उत्तर लगभग 50-60 शब्दों में लिखिए।  
 (क) गंतोक को 'मेहनतकश बादशाहों का शहर' क्यों कहा जाता है?  
 (ख) 'कटाओ' में किसी भी दुकान का न होना उसके लिए वरदान है। इस कथन के पक्ष में अपनी राय व्यक्त कीजिए।

खंड-घ( रचनात्मक लेखन)

10. निम्नलिखित विषय पर 120 शब्दों में सारगर्भित अनुच्छेद लिखिए।

- (क) छात्र असंतोष  
 संकेत बिंदु भूमिका  
 • छात्र असंतोष का प्रभाव  
 • शिक्षा का महत्त्व  
 • उपसंहार

11. विवेकानंद विद्यालय में हिन्दी विषय का पद रिक्त है। इस विषय से संबंधित एक स्ववृत्त तैयार कीजिए।

## ( Social science

Q.1 . A political party is an association of:

- (a) people. (b) children. (c) parties. (d) none of the these

2. The clearly visible institutions of a democracy are:

- (a) people. (b) societies. (c) political parties (d) pressure groups

Q.3 . Without the political parties, the utility of the government will remain:

- (a) uncertain. (b) powerful (c) peaceful (d) None of these

4. Parties are a necessary condition for a:

- (a) democracy (b) dictatorship (c) authoritarian. (d) none of these

5. In a democratic country, any group of citizens is free to form:

- a) Political party (b) society (c) religion. d) none of these

Q.6. ....is an organised group of persons who come together to contest election and try to hold power in government.

- (a) a political party (b) Democracy (c) Parliament. d) None of these

7. The political parties of a country have a fundamental political

- (a) division. (b) choice. (c) support. d) power

8. Members of ruling party follows the directions of:

- (a) people. (b) party leaders (b) pressure groups. (d) None of these

9. Which of the following statements are true about political parties?

- (a) The proportion of those who said they were members of some political party was lower in India than in many advanced countries like Canada, Japan.  
 (b) Over the last three decades, the proportion of those who report to be members of political parties in India has gone down steadily.  
 (c) The proportion of those who say they feel close to a political party has gone down in India  
 (d) None of these

10. National parties have their units in various states, but by and large, all these units follow the same policies, programmes and strategy that is decided at the

- (a) national level. (b) state level (c) district level. (d) village level

11. A party that secures at least six per cent of the total votes in an election to the legislative Assembly of a state and wins at least is recognised as a state party.

- (a) two seats. (b) three seats. c) one seat d) four seat

12. Which is a recognised political party  
 (a) A party that is present in only one of the federal units.  
 (b) A party that is based on regional and commercial diversities.  
 (c) A party that is recognised by the "Election Commission" with all the privileges and facilities  
 (d) A party that is present in several and all units of the federation.
13. According to the given classification, there were national recognised parties ?  
 (a) seven. (b) six (c) five (d) ten
16. Many of the pressure groups are extensions of society.  
 a) government b) legislature (c) political parties. (d) bureaucracy
14. We can judge democracy by its:  
 (a) people. (b) outcomes. (c) political parties
15. People feel that democracy is better as it promotes:  
 a) Equality. b) freedom. (c) dignity. (d) All of these
16. The successful democracy needs:  
 (a) right to vote. (b) Freedom (c) periodic elections (d) all of these
17. People should be vigilant and participate actively in the process of:  
 (a) Governance. (b) representation (c) choosing party. (d) All of these
18. The political parties and democratic government is accountable to:  
 (a) people. (b) world (c) Society. (d) None of these
19. Democracy even ensures the decision-making based on:  
 (a) norms (b) procedures. (c) both(a) and(b). (d) none of these
20. In democracy, we do come across evil practices, such as:  
 (a) corruption. (b) favourites (c) both a and b
21. Which of the following statements are true about Democratic Government?  
 (a) Democratic Government is a legitimate Government  
 (b) Democratic Government may be slow, less efficient, and not always very responsive or clean.  
 (c) Democratic Government is the people's own Government.  
 (d) All the above
22. Which of these factors play a role in the economic development of a country?  
 a) Cooperation from other countries (b) Size of the population  
 (c) Economic priorities adopted by the Government (d) All of the above
23. The rates of economic growth for different countries from 1950 to 2000 was highest among.....  
 (a) All democratic regimes (b) Poor countries under democracy  
 (c) Poor countries under dictatorship (d) All dictatorial regimes
- Q.24 How does democracy accommodate social diversity?  
 Q.25. Describe the main features of dictatorship.  
 Q.26. Analyse the components of a political party.  
 Q.27. Why do we need political parties?  
 Q.28. Examine the working of Political Parties.

### Map skill

**On the same outline map of India locate and label of the following with suitable symbols.**

- |  |                                      |
|--|--------------------------------------|
| A. A Coal mine in Tamil Nadu                               | B. A dam built on river Chenab.      |
| C. A large natural major seaport located at Andhra Pradesh | D. Noida software technology park    |
| E. Hirakud Dam   | F. Tarapur Atomic Power Station      |
| G. Noida Software Technology Park                          | H. Kochi Port                        |
| I. Indira Gandhi International Airport                     | J. Kakrapara - Atomic Power station. |
| K. Hyderabad - Software Technology Park                    | L. Kandla Sea Port                   |
| M. Rana Pratap Sagar                                       | N. Singrauli Thermal Plant           |
| O. Gandhinagar Software Technology Park                    | P. Paradip Port                      |

### English

Q.1 Answer of the following two questions in 100-120 words.

- (a) Grief or sadness is an emotion natural to all types of loss or significant change. You have been asked to present an analysis of the approaches of Lencho and Kisa Gotami in dealing with their respective losses. Write this presentation draft including your insights, and comparing the approach of both.  
 You may begin like this: One acknowledges that Lencho had unwavering faith in God whereas Kisa Gotami in her grief, believed that her son .....however.....

(Reference-A Letter to God and The Sermon at Benares)

OR

- (b) You have been chosen to address the school assembly on the occasion of Women's Day. You choose to speak on the resilience and indomitable spirit of the young girls: Anne Frank and Valli. Prepare the speech draft, with reference to the commonality and contrast in the situations and circumstances of both the girls.

(Madam Rides the Bus and From the Diary of Anne Frank)

You may begin like this: Good morning everyone. Today, I'd like to express my insights on the resilience of two young girls.....

You may end this way: To conclude I'd like to say that.....

Thankyou.

OR

- (c) You have been chosen to address the school assembly, to speak on the epistemology of loss and the resilience of the human spirit during times of crisis. Prepare the speech draft, with reference to the commonality of themes in 'The Ball Poem' by John Berryman and 'From the Diary of Anne Frank'

You may begin this way:

Good Morning everyone.

Today, I'd like to discuss two pieces of literature that offer a powerful insight into how to deal with loss and the resilience of the human spirit required during times of crisis.

You may end this way:

To conclude, I'd like to say that..... Thankyou

**Q.2 Answer the following two questions in 100-120 words.**

- (a) A character arc is the transformation or development of a character throughout a story and refers to the changes a character undergoes as a result of his/her experiences, challenges and interactions with others character.

In the light of the above information, trace the character arc of Bholi in K.A.Abbas's '(Bholi).

- (b) Imagine that Bholi writes a diary entry, exploring the themes of 'Girl Child' and 'Impact of Education', in the context of her own experiences.

Write this diary entry, as Bholi.

**Q.3 Answers the following questions in 40-50 words each.**

- (a) In every alternate stanza, Amanda drifts into fantasy and yearns for more than freedom and silence. Justify and elaborate the reason.

- (b) Coorg has been defined as a 'piece of heaven' by the writer. Justify.

- (c) The Author says- 'During our childhood in God, the baker used to be our friend, companion and guide.' Elaborate.

- (d) Maxwell decides to keep an Otter as a pet. Elucidate with reference to the fact that owning a pet is a life of commitment.

- (e) Do you think you can love a person for his/her inner beauty alone and not care about the physical appearance? Justify with reference to the theme of the poem 'For Anne Gregory'.

- (f) What did Valli find out about the bus journey? How did she find out these details?

**Q.4 Answer the following questions in 40-50 words each.**

- (a) How can one say that Ebright's curiosity/ inquisitiveness drove him to become a scientist?

- (b) "Horace Danby is a thief who cheated by another thief." Justify.

- (c) Despite his unusual appearance, Ausable's presence of mind helped him get rid of Max. Comment with reference to the story "The Midnight Visitor".

- (d) Mention any two of Ebright's contributions to the world of science?

**Q.5 Read the following extracts and answer the questions.**

- (a) For the first twenty-four hours, Mijbil was neither hostile nor friendly; he was simply aloof and indifferent, choosing to sleep on the floor as far from my bed as possible. The second night Mijbil came on to my bed in the small hours and remained asleep in the crook of my knees until the servant brought tea in the morning, and during the day he began to lose his apathy and take a keen, much too keen, interest in his surroundings. I made a body-belt for him and took him on a lead to the bathroom, where for half an hour he went wild with joy in the water.

- (1) Which of the following is not a reason why Mijbil came on to Maxwell's bed in the small hours?

(A) He had started taking interest in his surroundings.

(B) He was becoming friendly with Maxwell.

(C) He wanted to play with Maxwell on his bed.

(D) He wanted to feel safe and not remain indifferent.

- (2) Maxwell says that Mijbil was neither hostile nor friendly, he was simply aloof and indifferent for the first twenty four hours. Give reasons in not more than 40 words.

- (3) Read the following descriptions and identify which one correctly corresponds to the extract.

(A) Owning a pet is tedious and needs commitments.

(B) A pet needs his own space and time to get adjusted to his owner's environment.



(C) Maxwell decided to bring Mijbil because he was very sad to lose his dog.

(D) Maxwell and Mijbil loved travelling.

(4) Which characteristics traits of otters is revealed when Mijbil is taken to the bathroom.

### Science Section - A

- (1) Define magnetic field lines.
- (2) Define far point of eye and power of accommodation.
- (3) How does binary fission differ from multiple fission.
- (4) State right hand thumb rule .
- (5) Why does the sky appear dark instead of blue to an astronaut .

### Section - B

- (1) Explain magnetic field due to a current in a solenoid .
- (2) Explain why the planets don't twinkle.
- (3) What is the importance of DNA copying in reproduction ?
- (4) List the properties of magnetic lines of force.
- (5) How will an organism be benefitted if it reproduces through spores

### Section C

- (1) Explain force on a current carrying conductor in a magnetic field.
- (2) Define dispersion of light and spectrum.
- (3) How a rainbow is formed.
- (4) How is the process of pollination different from fertilisation?
- (5) Explain magnetic field due to a current through a circular loop.

### Section D

- (1) Explain the structure of human eye.
- (2) Explain the fertilisation in a flowering plant.
- (3) Explain the defects of eye in detail.
- (4) Draw magnetic field pattern for bar magnet. Explain kick wire experiment briefly.

### (Biology and Chemistry)

#### Section A: Multiple Choice Questions (MCQs)

- Q1. Which of the following is not a method of asexual reproduction in plants?  
a) Fragmentation                      b) Budding                      c) Seed formation                      d) Spore formation
- Q2. Vegetative propagation refers to:  
a) Reproduction through seeds                      b) Growth from a part of the plant  
c) Spore formation                      d) Fusion of gametes
- Q3. Bryophyllum reproduces through:  
a) Roots                      b) Stem cuttings                      c) Leaves                      d) Flowers
- Q4. Asexual reproduction results in:  
a) Genetic variation                      b) Offspring identical to parents  
c) Formation of zygote                      d) Cross-pollination
- Q5. Which of the following is an example of artificial vegetative propagation?  
a) Grafting                      b) Spore formation                      c) Budding                      d) Binary fission
- Q6. In spore formation, the structure that produces spores is called:  
a) Sporangium                      b) Anther                      c) Pollen                      d) Ovary
- Q7. The process in which a single parent gives rise to new individuals is known as:  
a) Sexual reproduction                      b) Asexual reproduction  
c) Fertilization                      d) Pollination
- Q8. Which plant reproduces asexually through runners?  
a) Rose                      b) Mint                      c) Onion                      d) Potato
- Q9. The small bulb-like projections involved in budding are called:  
a) Spores                      b) Buds                      c) Tubers                      d) Corms
- Q10. The main advantage of vegetative propagation is:  
a) Genetic diversity                      b) Large number of seeds

c) Short time for reproduction                      d) Increased variation in plants

Q11. Which method of reproduction is found in yeast?

a) Budding                      b) Fragmentation                      c) Spore formation                      d) Binary fission

Q12. The potato tuber reproduces by:

a) Seeds                      b) Stem                      c) Leaves                      d) Buds

Q13. Which of the following methods does not involve sexual reproduction?

a) Fertilization                      b) Pollination                      c) Fragmentation                      d) Gamete formation

Q14. Which of the following is a natural method of vegetative propagation?

a) Cutting                      b) Layering                      c) Grafting                      d) Bulb

Q15. What type of reproduction takes place in algae like Spirogyra?

a) Binary fission                      b) Fragmentation                      c) Budding                      d) Grafting

### **Section B: Short Answer Questions**

Q16. Define asexual reproduction. How is it different from sexual reproduction?

Q17. Describe the process of spore formation in fungi.

Q18. How does vegetative propagation occur in Bryophyllum?

Q19. What is grafting, and how is it beneficial in plant reproduction?

Q20. Explain how artificial vegetative propagation is performed by cutting.

Q21. Give two advantages of asexual reproduction in plants.

### **Section C: Short Answer Questions**

Q22. Explain how vegetative propagation occurs in a potato.

Q23. Describe the process of budding in Hydra. How is it similar to budding in yeast?

Q24. What are the different types of asexual reproduction in plants? Give examples.

Q25. Why is vegetative propagation preferred for growing some types of plants? Mention two examples.

Q26. Describe fragmentation and give an example of an organism that reproduces using this method.

### **Section D: Long Answer Questions**

Q27. Explain the process of tissue culture and its importance in modern agriculture.

Q28. Describe the various methods of natural vegetative propagation in plants with examples.

Q29. Discuss the advantages and disadvantages of asexual reproduction in plants compared to sexual reproduction.