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HOLIDAY HOMEWORK – WINTER BREAK-2021 (22.12.2021 TO 02.01.2022) CLASS – XI SCIENCE & COMMERCE

ATTEMPT ALL THE QUESTIONS:

SECTION – LITERATURE – (PROSE): THE BROWNING VERSION & (POETRY) CHILDHOOD (HORNBILL)

O.1 Short Answer Type Questions:

- (a) "We get all the slackers!" What did Mr. Frank mean?
- (b) What did Taplow consider 'muck'? Why?
- (c) Who gave Taplow extra work on the last day of the term and why?
- (d) Why was Taplow bitter?
- (e) Who is Mr. Crocker Harris? How was he different from other masters?
- (f) Who is Millie Crocker-Harris? How did Mr. Frank and Taplow react to the sudden arrival of Millie Crocker-Harris?
- (g) What is the poet trying to convey when he says that childhood is hidden infant's face?
- (h) What is the poet's feeling towards his childhood?

Q. 2 Long Answer Type Questions:

- (i) Compare and contrast Mr. Frank and Mr. Crocker-Harris.
- (j) Taplow does an imitation of Mr. Crocker-Harris.

 Do you think respect for one's teacher is fast disappearing in this modern era?

 Give reason in support of your answer.
- (k) Write up an article in about 130 words about childhood and the process of growing up.

केंद्रीय विद्यालय ए० एफ० एस०, बागडोगरा शीतकालीन अवकाश गृह कार्य हिंदी (xı)

निम्नलिखित प्रश्नों के उत्तर दीजिये :

- (क) वर्षा यहाँ एक घटना है, एक सुखद संयोग है लेखक ने ऐसा क्यों कहा है?
- (ख) स्पीति में बारिश का वर्णन एक अलग तरीके से किया गया है। आप अपने यहाँ होने वाली बारिश का वर्णन कीजिये।
- (ग) ऐसी पाँच रचनाओं का संकलन कीजिये जिसमे प्रकृति के उपादानों की कल्पना संदेशवाहक के रूप में की गई है।
- (घ) घर से अलग होकर आप घर को किस तरह से याद करते हैं? लिखें।

"परियोजना कार्य"

दुष्यन्त कुमार का सामान्य जीवन परिचय दीजिये एवं हिंदी ग़ज़ल में उनके योगदानों का संक्षिप्त विवरण प्रस्तुत करें।

KENDRIYA VIDYALAYA AFS BAGDOGRA

WINTER BREAK HOME WORK CLASS XI: MATHS

1. If
$$\sec\theta = \sqrt{2}$$
 and $\frac{3\pi}{2} < \theta < 2\pi$, find the value of $\frac{1+tan\theta+cosec\theta}{1+cot\theta-cosec\theta}$

2. If
$$\tan \beta = \frac{n \sin \alpha \cos \alpha}{1 - n \sin^2 \alpha}$$
, show that $\tan \tan (\alpha - \beta) = (1 - n) \tan \alpha$

3. If
$$atan\alpha + b tan\beta = (a + b) tan tan \left(\frac{\alpha + \beta}{2}\right), \ \alpha \neq \beta, \ prove \ that \ acos\beta = bcos\alpha$$

4. If
$$\tan A - \tan B = x$$
 and $\cot B - \cot A = y$, prove that $\cot (A - B) = \frac{1}{x} + \frac{1}{y}$

5. If
$$\alpha$$
 and B are the solutions of the equation

$$atanx + bsecx = c$$
, then show that $tan(\alpha + \beta) = \frac{2ac}{a^2-c^2}$

6. Prove that :
$$\frac{1}{\sin\sin((x-a))\sin\sin((x-b))} = \frac{\cot\cot((x-a)) - \cot\cot((x-b))}{\sin\sin((a-b))}$$

7. Prove that :
$$\sin A \sin(60^{\circ} - A) \sin(60^{\circ} + A) = \frac{1}{4} \sin 3A$$

$$\left(\frac{\cos A + \cos B}{\sin A - \sin B}\right)^n + \left(\frac{\sin A + \sin B}{\cos A - \cos B}\right)^n = \left\{2\cot^n\left(\frac{A - B}{2}\right), \text{ if } n \text{ is even } 0, \text{ if } n \text{ is odd}\right\}$$

9. Prove that
$$sec^2\theta + cosec^2\theta \ge 4$$

10. If
$$3\sin x + 5\cos x = 5$$
, then write the value of $5\sin x - 3\cos x$.

11. If
$$tan(\pi cos\theta) = cot(\pi sin\theta)$$
, prove that $cos(\theta - \frac{\pi}{4}) = \pm \frac{1}{2\sqrt{2}}$

12. Prove that :
$$tan142\frac{1}{2}^{\circ} = 2 + \sqrt{2} - \sqrt{3} - \sqrt{6}$$

13. solution of :
$$(\sqrt{3}sin\theta + cos\theta) + (\sqrt{3}cos\theta - sin\theta) = 2$$

16. If x and y are real, show that
$$sec^2\theta = \frac{4xy}{(x+y)^2}$$
 is possible only when x = y.

17. If
$$x\cos\theta = y\cos\left(\theta + \frac{2\pi}{3}\right) = z\cos\left(\theta + \frac{4\pi}{3}\right)$$
, find $\frac{1}{x} + \frac{1}{y} + \frac{1}{z}$

18. If
$$0 < x < \pi$$
 and $cosx + sinx = \frac{1}{2}$, find the value of tanx