

Class XII summer vacation homework

English

Std XII A - To write Q and Ans.  
from 1st-4 chapter and 1st  
two poems.

Std XII B - To write Q and Ans.  
from 1st two and 4th chapter -  
and also from 1st two poem.

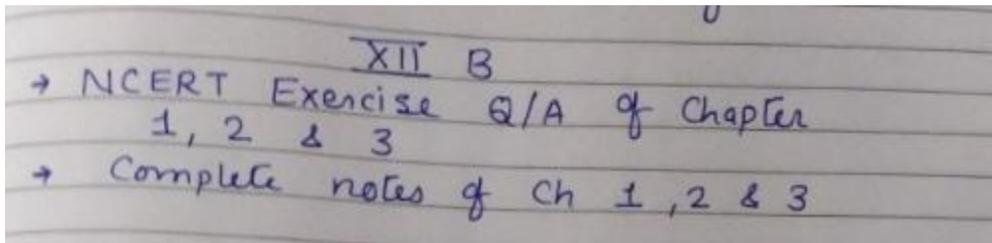
Std XII C. | First three  
chapters - to write  
the Q and Ans and  
first two poems to complete  
the answers.

Std XII E - First three chapters -  
to write the Q and Ans -  
and first two poems to  
complete the answers

### Sub Hindi

1 कोविड-19 और उसका प्रभावि/ बेरोजगारी की समस्या /शिक्षा का उद्देश्य/मेरे सपनों का भारत इनमें से ककन्ही दो पर 125-150 िब्दों में ननबंध शिखिए। 2. आप अपने वप्रय साहहत्यकार के जीिन पररचय के साथ साहहत्यक योगदान को रेिांककत करें। कम से कम 200 िब्दों में।

### Sub science



### Biology

#### NCERT EXEMPLAR PROBLEMS

Very Short Answer Type Question (Q1- Q12)

### Business studies

1. Complete all the assignments from chapter 1 and 2
2. learn all the topics taught from chapter 1, 2 and 3
3. prepare notes of topics taught from chapter 3

11:12 ✓

**XII ACCOUNTANCY**  
CU-1 Accounting for NBT for Profit Organisation  
Do all assignments & Questions of your Text Book  
CU-2 Accounting for Partnerships Firms (Fundamentals)  
Solve all test work assigned of these chapters.

Subject - Pol.Sc.  
(i) Write QA of chapters taught by 08-06-2021 in CW copy.  
(ii) Prepare Time-line of Cold War Era, EU, ASEAN in a Chart paper.  
(iii) Make notes on Planning Commission, NITI Ayog, NDC.

### Sub Maths

### XII B and C

SUMMER VACATION H/W

FROM NCERT BOOK

EX 5.2. QUESTIONS 4,7,8

EX 5.3. QUESTIONS 8,10,12

EX 5.5. QUESTIONS 2,6,12,13

EX 5.6 QUESTIONS 7,10,11.

### XII A

- 1.** Write the derivative of  $\sin x$  with respect to  $\cos x$ .

**2.** If  $\cos y = x \cos (a + y)$ , where  $\cos a \neq \pm 1$ ,  
prove that  $\frac{dy}{dx} = \frac{\cos^2(a + y)}{\sin a}$ .

**3.** If  $y = \sin^{-1} \{x\sqrt{1-x} - \sqrt{x}\sqrt{1-x^2}\}$  and  $0 < x < 1$ , then find  $\frac{dy}{dx}$ .

**4.** If  $e^x + e^y = e^{x+y}$ , prove that  $\frac{dy}{dx} + e^{y-x} = 0$ .

5. Find the value of  $\frac{dy}{dx}$  at  $\theta = \frac{\pi}{4}$ , if

$$x = ae^{\theta} (\sin\theta - \cos\theta) \text{ and } y = ae^{\theta} (\sin\theta + \cos\theta).$$

6. If  $x = a \left( \cos t + \log \tan \frac{t}{2} \right)$ ,  $y = a \sin t$ , then

evaluate  $\frac{d^2y}{dx^2}$  at  $t = \frac{\pi}{3}$ .

7. If  $x^m y^n = (x + y)^{m+n}$ , prove that  $\frac{dy}{dx} = \frac{y}{x}$ .

8. If  $x = a \cos\theta + b \sin\theta$  and  $y = a \sin\theta - b \cos\theta$ ,

show that  $y^2 \frac{d^2y}{dx^2} - x \frac{dy}{dx} + y = 0$ .

9. Differentiate  $\tan^{-1} \left( \frac{\sqrt{1-x^2}}{x} \right)$  w.r.t.

$\cos^{-1}(2x\sqrt{1-x^2})$ , when  $x \neq 0$ .

**10.** If  $y = x^x$ , then prove that

$$\frac{d^2y}{dx^2} - \frac{1}{y} \left( \frac{dy}{dx} \right)^2 - \frac{y}{x} = 0.$$

**11.** Differentiate  $\tan^{-1} \left( \frac{x}{\sqrt{1-x^2}} \right)$  w.r.t.  
 $\sin^{-1} (2x \sqrt{1-x^2})$ .

**12.** Differentiate  $\tan^{-1} \left( \frac{\sqrt{1+x^2}-1}{x} \right)$  w.r.t.

$$\sin^{-1} \left( \frac{2x}{1+x^2} \right), \text{ when } x \neq 0.$$

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**13.** If  $y = Pe^{ax} + Qe^{bx}$ , then show that

$$\frac{d^2y}{dx^2} - (a + b)\frac{dy}{dx} + aby = 0.$$

**14.** If  $x = \cos t (3 - 2 \cos^2 t)$  and

$y = \sin t (3 - 2 \sin^2 t)$ , then find the value of  $\frac{dy}{dx}$

at  $t = \frac{\pi}{4}$ .

**15.** If  $(x - y) e^{\frac{x}{x-y}} = a$ . Prove that  $y \frac{dy}{dx} + x = 2y$ .

**16.** If  $x = a(\cos t + t \sin t)$  and  $y = a(\sin t - t \cos t)$ ,  
then find the value of  $\frac{d^2y}{dx^2}$  at  $t = \frac{\pi}{4}$ .

**17.** If  $y = \tan^{-1} \left( \frac{a}{x} \right) + \log \sqrt{\frac{x-a}{x+a}}$ , prove that

$$\frac{dy}{dx} = \frac{2a^3}{x^4 - a^4}.$$

**18.** If  $x = a \sin 2t (1 + \cos 2t)$  and  
 $y = b \cos 2t (1 - \cos 2t)$ , then show that at  
 $t = \frac{\pi}{4}$ ,  $\left(\frac{dy}{dx}\right) = \frac{b}{a}$ .

**19.** If  $(\tan^{-1} x)^y + y^{\cot x} = 1$ , then find  $dy/dx$ .

**20.** If  $x = 2\cos\theta - \cos 2\theta$  and  $y = 2\sin\theta - \sin 2\theta$ ,  
then prove that  $\frac{dy}{dx} = \tan\left(\frac{3\theta}{2}\right)$ .

**21.** If  $y = (\sin x)^x + \sin^{-1} \sqrt{x}$ , then find  $\frac{dy}{dx}$ .

1. Multiple choice question.

1. The first Director-General of A.S.I. (Archaeological Survey of India) was \_\_\_\_\_.

- (a) R. E. M. Wheeler
- b) Alexander Cunningham
- c) Sir John Marshall

2.The center of Craft Production in Harappan Civilization was \_\_\_\_\_.

- (a) Dholavira
- (b) Chanhudaro
- (c) Kalibangan.

3.Ancient Mesopotamian texts refer to copper coming from a place called \_\_\_\_\_

4.\_\_\_\_\_ have been the only means in use for grinding cereals.

5.A material made of ground sand or silica mixed with colour and a gum and then fired is called \_\_\_\_\_.

- (a) faience
- (b) jasper
- (c) spindle
- (d) None of the above

6.Which among the following is a very soft stone ?

- (a) Steatite
- (b) Jasper
- (c) Carnelian
- (d) None of the above

7.Mesopotamian texts refer to Meluhha as a land of \_\_\_\_\_.

- (a) hunters
- (b) seafarers
- (c) agriculture
- (d) None of the above

8.\_\_\_\_\_ are men and women who claim magical and healing powers, as well as an ability to communicate with the other world.

**9. Harappa is situated on the bank of which river?**

- (a) Indus
- (b) Beas
- (c) Sutlej
- (d) Ravi

**10. Which of the following is not part of Archaeology?**

- (a) Literature
- (b) Coins
- (c) Inscriptions
- (d) Ruins

**2. Match the following.**

A	B
Harappan Seals	Priestly King
Centre of Power	Picture script
Mortimer Wheeler	Hill of the Dead
Mohenjo Daro	Ayran attack

**3. Find the relation between a and b in each group and fill in the blank accordingly.**

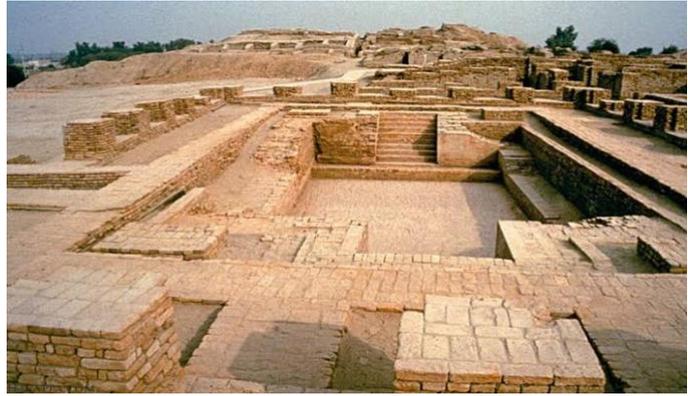
1. A. Magan : Oman  
B. Dilmun : .....
2. A. Fortress : Public buildings  
B. Lower Town : .....
3. A. Charles Masson : English Official  
B. Cunningham : .....

**4. Identify the pictures and write few lines about them.**

1.



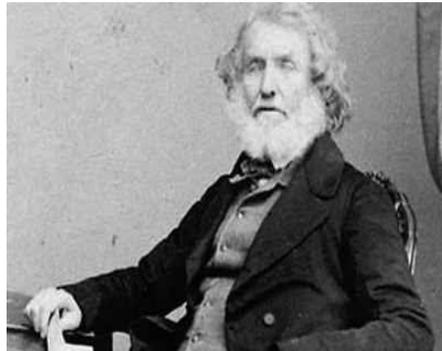
2



3.



4



**5. Short answer type questions.**

(a) Which of the following name is appropriate, Indus valley civilization or Harappan Culture.

(b) Which was the first site of Indus valley civilization where this unique culture was discovered?

(c) Where was evidence of ploughed field found in Indus Valley Civilization?

(d) Terracotta models of the plough have been found at which sites in Indus valley Civilization?

(e) From which traces of canals have been found in Indus valley Civilization.

(f) Where was water reserve found in Indus valley Civilization .

(g) Name any two structures which were found in the Citadel?

(h) In Mesopotamians texts Dilmun, Meluhha and Magan words are used for which centres?

(i) The longest signs containing inscription contains how many signs?

(j) Harappa Script was written from which side?

## THEME - II

### THROUGH THE EYES OF TRAVELLERS

#### 1. Multiple choice question

Question 1.

Which of these French travellers came to during 17th century?

- (a) Al-Biruni
- (b) Ibn-Battuta
- (c) Abul Fail
- (d) Francois Bernier

Question 2.

Who among the following belonged to Morocco?

- (a) Ibn Battuta
- (b) Al-Biruni
- (c) Francois Bernier
- (d) Abdul Samarandi

Question 3.

Who Wrote 'Kitab-ul-Hind'?

- (a) Callin Mcenzie
- (b) Al-Biruni
- (c) Abdul Samad Lahori
- (d) Ibn-Battuta

Question 4.

Islamic Law is known as \_\_\_\_\_

- (a) Shariya
- (b) Samr
- (c) Ulema
- (d) All of these

Question 5.

Ibn Battuta remained in India for \_\_\_\_\_ years.

- (a) 12
- (b) 14
- (e) 16
- (d) 18

Question 6.

Which of the following cities, according to Ibn-Battuta, was the largest?

- (a) Surat
- (b) Delhi
- (c) Daulatabad
- (d) Agra

Question 7.

Who wrote the book, "Travells In The Mughal Empire"?

- (a) Francois Bernier
- (b) John Marshall
- (c) Callin Mcenzie
- (d) James Princep

Question 8.

Which among the following was the book written by Al-Biruni?

- (a) Rihla
- (b) Kitab-ul-Hind
- (c) Discovery of India
- (d) Arthashastra

Question 9.

Choose the correct option:

Who founded Delhi as a city full of exciting opportunities?

- (a) Jbn-Battuta
- (b) Al-Biruni
- (c) Francois Bernier
- (d) Karl Marx

Question 10.

Choose the correct option:

- (a) Ibn-Battuta travelled extensively in China.
- (b) Al-Biruni found the Indian cities quite populated.
- (c) Al-Biruni was greatly influenced by the Indian postal system.
- (d) According to Ibn-Battuta. crown ownership of land was quite disasterous for farmers.

## **2. Short answer type questions.**

(a) Name any two travellers who came India during the medieval period (11th to 17th C)?

(b) What was the Al-Biruni's objective to come India?

(c) Do you think Al-Biruni depended only on Sanskrit texts for his information and understanding of Indian society?

## **3. Long answer type questions**

(a) According to Bernier, What were the evils-effects of the crown ownership of land?

(b) What did Bernier write about the Sati system?

(c) Who wrote 'Kitab-ul-Hind'? Throw light in its main features?

**NOTE:** Students must write down the answers in Class work copy only.