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### BCM SCHOOL

# Chandigarh Road, Ludhiana Summer Holidays Homework (2019-20)

### **Class XII- Humanities**

### **ENGLISH**

- 1. RonitNarang has been selected to play in cricket matches as a member of the famous Kolkata Knight Riders. To celebrate his selection, his parents Sudhir and Sunita Narang want to give a party for him at the Park Hotel, Ranchi. Write an invitation to Ronit's friend Misha/ManasArora inviting him/her for the same.
- 2. You are the Principal of St. Mary's School, New Delhi. You wish to invite the Joint Commissioner of Police (Traffic) to hold a demonstration for the observance of 'Safety Week' at your school. Draft a formal invitation for the same.
- 3. Nowadays, people have become so busy with their own lives that they have forgotten the little pleasures of life. We have forgotten how to enjoy quiet walks or sit with a cup of tea or coffee and just enjoy the scenery. Write a speech reminding your friends about the simple pleasures of life that are taken for granted. You are Meera/MohitKapoor.
- 4. 'Private cars should be banned in the congested commercial areas of the cities.' Write a debate in about 150-200 words either for or against the motion.

5. MMD School, Nashik, recently organized a science symposium on the topic: 'Effect of Pollution on Quality Of Life'. Write a report on the event for your school magazine in about 120-150 words.

Holidays home work must be done in English Classwork Notebook.

### **ECONOMICS:**

- 1) What are the reasons that led to the adoption of new economic policy?
- 2) what was the principal objective of IPR1956? Did we really achieve it?
- 3) Was is inward looking trade policy? How relevant it is in the context of growth and development?
- 4) Describe the recent changes in the direction of India's exports and imports.
- 5) It is said that New economic policy is liberal. Do you agree? Give arguments in support of your answer.
- 6) Evaluate the fiscal reforms introduced under the new economic policy.
- 7) Why was public sector given a leading role in industrial development during the planning period?
- 8) While subsidies encourage farmers to use new technology, they are a huge burden on government finances. Discuss the usefulness of subsidies in this context.
- 9) Distinguish between Centrally planned economy and Mixed economy.
- 10) Explain how import substitution can protect domestic industry.
- 11) Discuss economic reforms in the light of social justice and welfare.
- 12) How change in money supply can contribute to stability in the economy?
- 13) Bring out the differences between central bank and commercial banks on the basis of functions they perform.
- 14) Using the equation of consumption function C= c+bY, calculate consumption expenditure at the income level of 500 Crores. if autonomous consumption is 40 cr. and 40% of additional income is saved.
- 15) Explain the components of domestic factor income.
- 16) In the present scenario when the industrial growth is low, do you think a cut in repo rate by the RBI would accelerate the pace of economic growth?
- 17) State briefly the various instruments of monetary policy.
- 18) Explain the currency authority function of Central Bank.
- 19) The consumption function for an economy is C=20+0.8Y.Determine the level of income when APC will be equal to one.
- 20) Draw a straight line saving curve on a diagram for an economy. From it derive the consumption curve, explaining the method of derivation. Show a point on the consumption curve at which average propensity to consume is equal to 1.
- 21) PROJECT WORK (As discussed in the class)

### POL.SCI

Project work

Do any one

- 1. UN: It's Agencies, list of UN Secretaries- General Principal Organs, Restructuring of UN, India's involvement and achievements
- 2. Enverionment and natural resources: Important conventions, Agenda 21,problems of ecological issues, Kyoto Protocol, environmental movements etc.

3. Security: Traditional and Non Traditional notions: External and Internal notions, human security, global security, terrorism, human rights, global poverty, health epidemics

4. Recent developments in Indian politics: main stress on loksabha elections 2019

Answer the following questions-

- 1. Name the first business school which was established in U.S.A in 1981.
- 2. How did the U.S respond to the 9/11 attacks?
- 3. Who was the President of U.S.A. at the time of the First Gulf War?
- 4 Which organisation was established under 'Marshall Plan'?
- 5. In which year the unification of Germany take place?
- 6. In which year China adopted the Open Door policy in economy?
- 7. When was Referendum take place in England for it exit from European Union, commonly known as BREXIT?
- 8. Mention two drawbacks of China's new economic policy.
- 9. Illustrate two major points of dispute with China.
- 10. Describe the difference between Neutrality and Non-alignment

## Maths

Q.1: Find the value of 'a' for which the function f defined as

$$f(x) = \begin{cases} a \sin \frac{\pi}{2}(x+1) & x \le 0\\ \frac{tanx - sinx}{x^3} & x > 0 \end{cases}$$
 is continuous at x=0

**Q.2**: If 
$$x^y + y^x = (x + y)^{x+y}$$
, find  $\frac{dy}{dx}$ .

Q.3: Determine the values of a, b & c for which the function

$$f(x) = \begin{cases} \frac{\sin(a+1)x + \sin x}{x} & x < 0\\ c & x = 0 \text{ may be continuous at } x = 0.\\ \frac{\sqrt{x + bx^2} - \sqrt{x}}{b\sqrt{x^3}} & x > 0 \end{cases}$$
On the function  $f(x) = x^m \sin(\frac{1}{x})$  and  $x \neq 0$ .

Q.4:Show that the function 
$$f(x) = x^m \sin(\frac{1}{x})$$
,  $x \neq 0$ 

is (i) differentiable at x = 0 , if m > 1 (ii) not differentiable at x = 0 , if 0 < m < 1 .

**Q.5**: If 
$$x = \sec\theta - \cos\theta$$
 and  $y = \sec^n\theta - \cos^n\theta$ , then show that :  $(x^2 + 4)(\frac{dy}{dx})^2 = n^2(y^2 + 4)$ .

**Q.6**: Show that 
$$f(x) = \frac{\sin 3x}{\tan 2x}$$
 if  $x < 0$ 

$$\frac{3}{2}$$
 if  $x = 0$  is continuous at  $x = 0$ .

$$\frac{\log(1+3x)}{e^{2x}-1} \text{if } x > 0$$

**Q.7**: If y = 
$$[\log(x + \sqrt{x^2 + a^2})]^2$$
, show that  $(x^2 + a^2)\frac{d^2y}{dx^2} + x\frac{dy}{dx} - 2 = 0$ .

**Q.8**:If y = 
$$\sin^{-1} \left[ x \sqrt{1-x} - \sqrt{x} \sqrt{1-x^2} \right]$$
 and 0< x < 1 then find  $\frac{dy}{dx}$ .

**Q.9**:Differentiatetan<sup>-1</sup> 
$$\frac{\sqrt{1-x^2}}{x}$$
 with respect to  $\cos^{-1}(2x\sqrt{1-x^2})$  where  $\frac{1}{\sqrt{2}} < x < 1$ .

**Q.10**:If 
$$\sqrt{1-x^2} + \sqrt{1-y^2} = a(x-y)$$
, prove that  $\frac{dy}{dx} = \sqrt{\frac{1-y^2}{1-x^2}}$ .

**Q.11**: If x = sin t and y = sin pt , prove that 
$$(1 - x^2) \frac{d^2y}{dx^2} - x \frac{dy}{dx} + p^2y = 0$$

**Q.11:** If  $x = \sin t$  and  $y = \sin pt$ , prove that  $(1 - x^2) \frac{d^2y}{dx^2} - x \frac{dy}{dx} + p^2y = 0$ . **Q.12:** Using mean value theorem, prove that there is a point on the curve  $y = 2x^2 - 5x + 3$  between the points A(1,0)

and B(2, 1) where tangent is parallel to chord AB. Also find that point.

**Q.13:**Show that the line  $\frac{x}{a} + \frac{y}{b} = 1$  touches the curve y = b  $e^{\frac{-x}{a}}$  at the point where the curve intersects the axis of y.

**Q.14:**Find the angle of intersection of the curves  $y^2 = x$  and  $x^2 = y$ .

**Q.15:** Find the intervals in which the function  $f(x) = \sin^4 x + \cos^4 x$ ,  $0 \le x \le \frac{\pi}{2}$ , is strictly increasing or decreasing.

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**Q.16:** If  $x = \tan(\frac{1}{a}\log y)$ , then show that  $(1 + x^2)\frac{d^2y}{dx^2} + (2x - a)\frac{dy}{dx} = 0$ .

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- **Q.17:** If  $y = \frac{2}{\sqrt{a^2 b^2}} \tan^{-1}(\sqrt{\frac{a+b}{a-b}} \tan \frac{x}{2})$ , prove that  $\frac{dy}{dx} = \frac{1}{a-b \cos x}$ , a > b > 0. **Q.18:** Find the equations of the tangent and normal lines to the curve  $y = t^2 + 4t + 1$  and  $x = t^2 + t + 1$  at the
- point (3, 6).
- **Q.19**: Find the equations of the tangent and normal lines to the curve  $16 x^2 + 9y^2 = 144$  at  $(x_1, y_1)$  where  $x_1$
- $y_1 > 0$ . Also find the points of intersection where both tangent and normal cut the x- axis.
- **Q.20**: Show that the curves  $x^2 + y^2 = 2a^2$  and  $xy = a^2$  touch each other.
- **Q.21**: If  $y = x \log(\frac{x}{a+bx})$  then show that  $x^3(\frac{d^2y}{dx^2}) = (x\frac{dy}{dx} y)^2$ .
- **Q.22:** Find  $\frac{d^2y}{dx^2}$  at  $\theta = \frac{\pi}{6}$  if  $x = a \cos^3 \theta$ ,  $y = a \sin^3 \theta$ .

### Project:

- \*To be done on coloured A 4 sheets
- \*Maximum number of pages 15-20
- 1.(1)Motor fitness test and (2) General motor fitness test
- 2. Procedure for administering Senior Citizen Fitness test for 5 elderly family members.

### Practical File:

- \*To be done in physical education practical file
- 1.Athletics- Labelled diagram of 400m Track and Field with computation.
- 2. Procedure for Asanas, benefits and contraindications for any two asanas for each lifestyle disease.
- 3. Labelled diagram of field and equipment of Volleyball with all the Rules, Terminologies and Skills of the game.

### Psvcholoav

- Revise Chapters 1-4.
  - Prepare your own objective-type questions from each chapter, and answer them. (Minimum 25 questions from each chapter)
  - Learn all the key terms.
  - Write down answers for the review questions given at the end of each chapter.
- Prepare a project file for a case study on any one psychological disorder.

### **HOME SCIENCE**

- Q1. Name the ingredients of ORS, recommended by WHO.
- Q2. What are the social issues have been focused under DWACRA?
- Q3. Which five points you will kept in mind while storing drinking water in the house?
- Q4. A family is served a meal consisting of dal, rice, curd and chapattis. Evaluate this meal and suggest modification along with reasons. What additional changes are necessary, if this meal is served to lactating mother and why?

- Q5. List the objectives of DWACRA.
- Q6. Meal planning is influenced by age and occupation. Support this statement with two examples each.
- Q7. Name the diseases caused by impure water. How will you make water potable with the help of alum?
- Q8. Explain the principles of meal planning with example
- Q9. Giyani, a 16 years old girl, tried to commit suicide due to her failure in board exams for last two years. Recognize the state of Giyani undergoing. Define it in short and write its five common symptoms.
- Q10. Write two disadvantages an adolescent may suffer from if he/she is not a member of any group?
- Q11. Within 15 days of getting your juicer-mixer repaired, it stopped working. State the two ways to deal with this problem.
- Q12. People suffering from jaundice need to be very careful about their diet. Give four dietary points they should adopt?
- Q13. Marsh is a laborer who does hard physical labor for about 12 hours a day. Enumerate four factors that his wife must kept in mind while preparing his lunch.
- Q14. Abita is a house wife. She wants to save fuel by meal planning. Suggest her some ways of doing this.
- Q15. Plan a day's menu for an adult suffering from diarrhea. Also make a list of practical considerations that you will kept in mind before planning menu.
- Q16. Certain chemicals are used for purification of water. Given below are some chemicals which are used for same purpose. Explain them in short. Chlorine Bleaching powder
- Q17. Economic status has a great effect on cognitive development. Explain the statement in brief.
- Q18. Intoxication is a curse that harms the entire prospects of teenagers. Enumerate various ways in which its bad effects are manifested.

- Q19. Due to intense work pressure at home and office, working women sometimes suffer from stress that results in Hypertension. Define hypertension. What are its symptoms that can help in diagnosing the problem?
- Q20. Name the food products which do not contain sodium.

- Q21. Write four social traits which develop in adolescence.
- Q22. Games play an important role in cognitive development. How do they inculcate the social values in the adolescents?
- Q23. Mr. Sharma lives in a joint family comprising of different individuals. Each member has its own particular nutritional needs according to their age, gender, occupation, health status etc. Explain how their meal planning is affected by it.
- Q24. What are the important things you will kept in mind while planning a meal for a pre-scholar?
- Q25. Media effects the selection of food in both negative and positive ways. Give examples of adverse effect of media on selection of food.

### **PROJECT:**

- Write a report on the needs and problems of old age.
- Write a report on the needs and problems of adolescents.

### **FINE ARTS**

- Practical: Compositions sheet -5
- Landscape sheets 5
- Still life copied 1
- Decorate your file cover
- Make headings of still life, landscapes, compositions.
- Theory: Learn unit-1 and 2.
- Rajasthani, pahadi, mughal, Deccan school.

Computer Science: Revision of Ch. 1 to 5, 9 with back exercise and sample question paper given.

### IP: Revise chapter 1 & 2.

Music: Revise whole syllabus done in the class.

Fashion Studies: LEARN UNIT – I (A) Notes (B) Back exercise

- 1. Assignment on Adornment and Beautification.
- 2. Assignment on Industrial Revolution.
- 3. Assignment on Uniforms of World War 1 and World War 2.
- 4. Develop a basic bodice block
- 5. Develop a sleeveless block
- 6. Develop a basic skirt block
- 7. Develop variations of skirt block
- 8. Develop various neckline patterns
- 9. Develop a basic sleeve pattern
- 10. Develop patterns with dart manipulation.
- 11. Design a baby blanket with self-generated prints inspired from nature.
- 12. Create a scarf using food products for dyeing process.
- 13. Develop a file cover with stencil printing technique.
- 14. Develop a bag/tie inspired from animal skin print.
- 15. Make sample of continuous placket, simple shirt placket and shirt placket with facing.
- 16. Make a sample of Bias binding, Bias facing and Shaped facing.

### **PUNJABI**

ਹੇਠਾਂ ਦਿੱਤੇ ਗਏ ਵਿਸ਼ਿਆਂ ਵਿੱਚੋਂ ਕਿਸੇ ਇੱਕ ਤੇ ਪ੍ਰਾਜੈਕਟ ਤਿਆਰ ਕਰਨਾ।(ਕਲਾਸ ਵਿੱਚ ਦੱਸੇ ਅਨੁਸਾਰ )

1.ਮੇਲੇ ਤੇ ਤਿਉਹਾਰ2. ਦੇਸ਼ ਭਗਤ (ਰਾਸ਼ਟਰ ਨੂੰ ਦੇਣ) 3.ਵਿਗਿਆਨੀ (ਸਮਾਜ ਨੂੰ ਦੇਣ) 4.ਲੇਖਕ (ਸਾਹਿਤਕ ਦੇਣ)

5.ਮਹਾਂਪੁਰਖ (ਜੀਵਨੀ ਤੇ ਉਪਦੇਸ਼)6. ਪੰਜਾਬੀ ਖੁਰਾਕ (ਸੰਤੁਲਿਤ ਆਹਾਰ) 7.ਬਜ਼ੁਰਗਾਂ ਦਾ ਘਟ ਰਿਹਾ ਸਤਿਕਾਰ (ਕਾਰਨ ਤੇ ਸੁਝਾਅ)8. ਵਿਦੇਸ਼ ਜਾਣ ਦੀ ਦੌੜ (ਮਜਬੂਰੀ ਜਾਂ ਸ਼ੌਂਕ)9. ਜੰਕ ਫੂਡ( ਵੱਧਦਾ ਪ੍ਰਚਲਨ ਤੇ ਨੁਕਸਾਨ )10. ਸੋਸ਼ਲ ਮੀਡੀਆ ਦਾ ਵਧ ਰਿਹਾ ਪ੍ਰਭਾਵ 

### <u>HINDI</u>

प्रश्न बनाइए प्रोजेक्ट पर विषय एक किसी 1- भारतीय युवा ,भारतीय संस्कृति ,भारत में धर्म ,भारतीय मीडिया ,भारत में लोकतंत्र,

प्रश्न-2-कविता एक से पांच तक के सार लिखें।

प्रश्न-3-पाठ लिखें। प्रतिपादय के तक 15 से 11

प्रश्न-4-वितान के पाठ लिखें। उद्देश्य के 2 और 1

प्रश्न-5-प्रतिदिन दैनिक हिंदी समाचार पत्र पढ़ें और उनमें से कोई पांच आलेख, फीचर लेख अथवा संपादकीय काटकर कॉपी में चिपकाए।

