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| **CLASS XI C** | **HOLIDAY HOMEWORK 2025** |

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| ENGLISH |
| **General Instructions:**   1. **Read the newspaper daily with special emphasis on school based reports, notices, posters and articles. Pay attention to the language used.** 2. **Attempt the following questions in English Registers.** 3. **Date of submission is 25 June,2025.**   **SECTION A- WRITING SKILLS**  **Passage 1:  The Importance of Emotional Intelligence**   1. In today's fast-paced world, technical knowledge alone is not enough to guarantee success. Increasingly, emotional intelligence (EI) is recognized as a critical factor in personal and professional achievements. Emotional intelligence is the ability to understand, manage, and express one's emotions effectively, while also being sensitive to the emotions of others. 2. Research shows that individuals with high EI are better at handling stress, resolving conflicts, and leading teams. They tend to have stronger interpersonal relationships and are more adaptable to changing environments. In contrast, individuals with low EI may struggle with teamwork and communication, even if they possess excellent technical skills. 3. Daniel Goleman, a renowned psychologist, identified five key components of emotional intelligence: self-awareness, self-regulation, motivation, empathy, and social skills. Self-awareness involves recognizing one's emotions and their impact, while self-regulation refers to controlling impulsive behaviors. Motivation is the inner drive to pursue goals with energy and persistence. Empathy is the ability to understand others' feelings, and social skills enable individuals to manage relationships successfully. 4. Organizations today prioritize EI when hiring and promoting employees, understanding that a cohesive, emotionally intelligent workforce enhances productivity and fosters a positive work culture. Moreover, educational institutions are beginning to incorporate EI training into their curricula to prepare students for the complexities of modern life. 5. While IQ might open doors to opportunities, it is emotional intelligence that often determines how far an individual will go. Developing EI requires conscious effort, including practices like active listening, self-reflection, and stress management. As the world becomes more interconnected and diverse, emotional intelligence will only grow in importance, shaping not just careers but also personal lives. 6. It is important to note that while IQ (Intelligence Quotient) might open initial doors and present opportunities, it is emotional intelligence that often determines how far an individual will ultimately go. Career advancement, leadership effectiveness, and even personal happiness are deeply intertwined with one's emotional capabilities. 7. However, developing emotional intelligence is not something that happens overnight. It requires conscious, sustained effort. Practices such as active listening, self-reflection, mindfulness, and stress management techniques are fundamental to nurturing EI. By investing time and effort in building emotional skills, individuals not only enhance their professional prospects but also enrich their personal relationships and overall quality of life. 8. As the world becomes increasingly interconnected, diverse, and fast-changing, emotional intelligence will continue to grow in importance. Those who cultivate it will be better positioned to succeed, to lead, and to build meaningful, fulfilling lives in a complex global society.   **A. Answer the following questions by choosing the most appropriate option:**  1. What is Emotional Intelligence (EI) primarily about?  (a) Technical expertise  (b) Understanding and managing emotions  (c) Memorizing facts  (d) Physical strength  2. According to Daniel Goleman, which of the following is NOT one of the five components of emotional intelligence?  (a) Self-awareness  (b) Self-regulation  (c) Motivation  (d) Intelligence Quotient  3. Why are organizations focusing more on Emotional Intelligence in employees?  (a) To enhance technical knowledge  (b) To ensure faster production  (c) To foster a positive work culture and improve productivity  (d) To increase competition among employees  4. What is one method mentioned for developing Emotional Intelligence?  (a) Avoiding teamwork  (b) Practicing active listening and self-reflection  (c) Memorizing emotional terms  (d) Ignoring stress  5. Which of the following best explains the relationship between IQ and EI according to the passage?  (a) IQ alone is enough for ultimate success  (b) EI is less important than IQ  (c) IQ opens doors, but EI determines long-term success  (d) IQ and EI are unrelated  **B. Answer the following questions briefly:**    1. Define emotional intelligence in your own words. Why is it important today?  2. List and briefly explain the five components of emotional intelligence according to Daniel Goleman.  3. How does high emotional intelligence benefit individuals in a professional setting?  4. Why are educational institutions incorporating emotional intelligence training in their programs?  5. According to the passage, how can one develop emotional intelligence? Mention any two practices.  **Passage 2: The Rise of Sustainable Fashion**  1.In recent years, the fashion industry has witnessed a transformative shift toward sustainability. Once criticized for being one of the most polluting industries in the world, fashion brands are now embracing eco-friendly practices to meet growing consumer demand for ethical and environmentally responsible products. This movement toward sustainable fashion is not just a trend but a necessary response to the urgent challenges posed by climate change, resource depletion, and social inequality.  2.One key aspect of sustainable fashion is the use of organic and recycled materials. Fabrics like organic cotton, hemp, bamboo, and recycled polyester are becoming increasingly popular among designers and manufacturers. These materials require less water, fewer chemicals, and lower energy consumption compared to traditional fabrics like conventional cotton and synthetic fibers. Moreover, recycling old garments to create new clothing pieces helps reduce the volume of textile waste that ends up in landfills.  3.Another important element is ethical labor practices. Many fast fashion brands have faced criticism for exploiting workers in developing countries, paying extremely low wages, and maintaining unsafe working conditions. In contrast, sustainable fashion brands are committed to fair wages, safe workplaces, and transparency in their supply chains. By ensuring that workers are treated with dignity and respect, these brands not only support social justice but also build consumer trust and loyalty.  4.Technology and innovation are also playing a significant role in driving sustainable fashion forward. Companies are experimenting with new production methods such as 3D printing, zero-waste pattern making, and plant-based dyes to reduce the environmental footprint of their products. Digital fashion—virtual clothing designed for avatars in gaming and social media—is emerging as a futuristic way to enjoy fashion without the environmental cost of physical production.  5.Consumer behavior, however, is perhaps the most critical factor in the success of sustainable fashion. While many consumers express a desire to shop sustainably, fast fashion’s low prices and rapid trends still dominate the market. Bridging this gap requires greater awareness, education, and a shift in cultural values toward valuing quality over quantity. Governments and non-profit organizations are also stepping in by creating certifications like Fair Trade and Global Organic Textile Standard (GOTS), helping consumers make informed decisions.  6.Despite the progress, sustainable fashion faces several challenges. High production costs, limited availability of eco-friendly materials, and greenwashing—where brands falsely claim to be sustainable—hinder the industry's growth. Nevertheless, as technology advances and awareness spreads, the future of fashion seems poised to be greener, more ethical, and more innovative than ever before.  7.In conclusion, the rise of sustainable fashion marks a pivotal shift in the way clothes are produced and consumed. It represents a blend of environmental responsibility, ethical commitment, and creative innovation. As more stakeholders—brands, consumers, governments—commit to this cause, the dream of a truly sustainable fashion industry could soon become a reality.  **A. Answer the following questions by choosing the most appropriate option:**  1. What is the main reason behind the rise of sustainable fashion?  (a) It is more affordable  (b) It is a response to environmental and social challenges  (c) It follows the latest celebrity trends  (d) It is easier to produce  2. Which material is not mentioned as sustainable in the passage?  (a) Hemp  (b) Organic cotton  (c) Silk  (d) Bamboo  3. How are companies reducing textile waste according to the passage?  (a) By burning old clothes  (b) By recycling old garments  (c) By producing only synthetic fibres  (d) By limiting fashion shows  4. What is ‘greenwashing’ in the context of fashion?  (a) Washing clothes using eco-friendly detergents  (b) Marketing tactics that falsely claim sustainability  (c) Creating green-coloured fashion lines  (d) Promoting natural fibres  5. Which technology is not mentioned as contributing to sustainable fashion?  (a) 3D printing  (b) Plant-based dyes  (c) Artificial intelligence  (d) Zero-waste pattern making  **B. Answer the following questions briefly:**  1. List two ways in which sustainable fashion is helping the environment.  2. Explain how ethical labour practices are related to sustainable fashion.  3. Why is consumer behaviour critical to the success of sustainable fashion?  4. What are some challenges faced by the sustainable fashion industry according to the passage?  5. Summarize the main idea of the passage in about 50–60 words.  **SECTION B- GRAMMAR**  **i)** **Fill in the blanks using the correct form of the words given in the brackets.**  The government has taken several steps to a)\_\_\_\_\_\_\_\_\_\_ (ensure/ensures/ensuring/ensured) the welfare of its citizens in the face of the ongoing economic crisis. Although some experts b)\_\_\_\_\_\_\_\_\_\_ (argue/argued/arguing/argues) that these measures may not be enough, there is general consensus that they c)\_\_\_\_\_\_\_\_\_\_ (help/helped/helps/helping) reduce the immediate impact of the recession. The focus now, however, is on how long these interventions d)\_\_\_\_\_\_\_\_\_\_ (lasts/lasting/last/lasted) and whether they can provide a foundation for long-term recovery. Economists have called for more attention to e)\_\_\_\_\_\_\_\_\_\_ (innovate/innovation/innovative/innovatively) solutions that will make the economy more resilient in the future.  **ii)** **Read the following passage, identify the errors and correct them.**  **Error Correction**  My little sister Lisa was practising how to riding a bicycle \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_  yesterday. Suddenly I hear a loud crash and ran to see what \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_  had happened. I saw that she was lying in the ground.  I quickly pulled her up and bought her home. \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_  She was crying out loud. I quickly go inside the house and \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_  brought the first aid box. After cleaning the wound, I apply \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_  antiseptic to the wound.  **SECTION C- LITERATURE**  **Write each of the following questions in 100-120 words.**  1. What does the photograph in the poem ‘A Photograph’ symbolize, and how does it reflect the theme of memory and loss?  2. Briefly comment on the title ‘The Portrait of a Lady’.  3. Identify and explain the poetic devices used in ‘A Photograph.’ How do these devices enhance the meaning of the poem?  4. How does the relationship between the author and his grandmother in ‘The Portrait of a Lady’ evolve throughout the story, and what factors contribute to this change?  5. “The right thing is the often the hardest thing to do.” Discuss this idea with reference to the story ‘The Summer of the Beautiful White Horse’.  **Project: Create and design a book cover for one of the prescribed texts in your syllabus on an A4-sized sheet.** |
| **PSYCHOLOGY**  **Date of submission: 26June, 2025**   1. Create a **comic strip or illustrated story** based on a real event from your life where you experienced a **strong emotion**—such as fear, stress, sadness, anger, or even joy—and show how you handled or overcame it. (Use A4 size coloured paper, coloured pens.)   Use the comic or illustration to:   * Tell a true personal story. * Show what emotion you felt. * Explain what triggered it. * Reflect on how you coped or responded.   *Examples of Possible Themes:*   * *Overcoming fear of public speaking.* * *Dealing with peer pressure in a friendship group (social influence).* * *Handling stress during a competition or tough time at school.*   2. Write an **essay on the ‘Importance of Emotional Intelligence in Everyday Life’** in your notebooks. (300 words)  3. Complete **NCERT ‘ Review questions’ (Ques. 1-8) of Chapter 1** in your notebook**.**   |  | | --- | | **GEOGRAPHY**  **Date of submission: 27 June 2025**  A.Prepare a Model or Collage(A3 size) on Impact of climate change on Sikkim  Selected students will make Models on topic – Course of a river, Interior of the Earth and Movement of Indian Plate,Earthquake shadow zone.  B. Complete Geography practical file from:   1. Chapter 1 Introduction to Maps 2. Chapter 2 Map Scale 3. Chapter 3 Latitude, Longitude and Time from the book Practical work in Geography (Part 1).   **Instructions:**  * Use A4 size interleaved practical file for the same. * Draw neatly labelled diagrams.   C. Complete the map activity and diagrams given below in the homework register only. | | Book - India: Physical Environment  Chapter 1   * Latitudinal extent of India * Longitudinal extent of India * Standard Meridian of India * Important latitude passing through India (Tropic of Cancer) * Southern Most Point of mainland of India (Kanya Kumari)   Chapter 2 Physical features of India   * Mountains: Karakoram Range, Garo- Khasi- Jaintia hills, Aravalli Range, Vindhyan Range, Satpura Range, Western ghats & Eastern ghats * Peaks: K2, Kanchenjunga, Nandadevi, Nanga Parvat, Namcha Barwa and Anaimudi * Passes: Shipkila, Nathula, Palghat, Bhor ghat and Thal ghat * Plateaus: Malwa, Chhotnagpur, Meghalaya and Deccan Plateau. * Coastal Plains: Saurashtra, Konkan, North and South Kanara, Malabar, Coromandel and     Northern Circars * Islands: Andaman & Nicobar Islands and Lakshadweep Islands   Chapter 3 Major rivers of India   * Rivers: Brahmaputra, Indus, Satluj, Ganga, Yamuna, Chambal, Damodar, Mahanadi, Krishna, Kaveri,Godavari, Narmada, Tapti and Luni * Lakes: (Identification)Wular, Sambhar, Chilika, Kolleru, Pulicat & Vembanad * Straits, Bays , Gulfs: Palk Strait, Rann of Kachch, Gulf of Kachch, Gulf of Mannar & Gulf of Khambat   Chapter 4   * Area with highest temperature in India * Area with lowest temperature in India * Area with highest rainfall in India * Area with lowest rainfall in India   Book- Fundamentals of Physical Geography  Chapter 3-Diagrams-1. Interior of the earth 2. Earthquake shadow zone 3. Volcanic landforms.  Chapter 4-Diagram - Sea Floor Spreading  map work-  1.Major and Minor plates of the world  2.Distribution of earthquakes and volcanoes  Political Map of all Continents of the world.   * Major Oceans of the world: Indian Ocean, Pacific Ocean, Atlantic Ocean, Arctic Ocean, Southern Ocean * Major lithospheric plates and Minor lithospheric plates, Ring of fire (Pacific Ocean), Mid-Atlantic Ridge.   3.Major Hot Deserts of the world:   * Mojave Desert- Nevada, US * Patagonian Desert- Argentina * Sahara- Africa * Gobi Desert- Mongolia, Asia * Thar desert- India * Great Victoria desert- Australia   4. Major Seas   * Black sea ,Baltic sea,Caspian Sea , Mediterranean Sea ,North Sea ,Red sea , Bay of Fundy (Canada)-Famous for the highest tides in the world.   5. Ocean Currents-   * Cold currents ,Humboldt c. , California c. , Falkland c. , Canaries c. ,West Australian c. ,Oyashio c. ,Labrador c. * Warm currents , Alaska c. , Brazilian c. , Aughlas c. , Kuroshio c. ,Gulf stream c.   Chapter 5-Diagram- Rock cycle  Chapter 6-Diagram- Mass movement  Chapter 7 - Paste images of the following from the internet-  V shaped Valley, Gorge, Canyon, U shaped Valley, Waterfall, Rapids, River meanders, Oxbow lake, Delta, Estuaries.  D. ASSIGNMENT- (To be done in the Notebook)  Q.1 Differentiate between Physical Geography and Biogeography.  Q.2 Differentiate between Systematic approach and Regional approach.  Q.3 On the basis of regional approach, explain different branches of geography.  Q.4 Explain different branches of geography under Biogeography.  Q.5 What is the importance of Physical Geography?  Q.6 Geographers play an important role for a country. How?  Q.7 List the stages in the evolution of the Earth and explain each stage in brief.  Q.8 Explain how did life evolve on the Earth?  Q.9 Explain the different phases of evolution of planets.  Q.10 Explain the earliest theory associated with the origin of the Earth  Q.11 Explain the modern theory associated with evolution of the Universe.  Q.12 Name the different hypothesis associated with the formation of the Earth. |  **POLITICAL SCIENCE** **Submission Date: 30 June,2025**   * 1. Read and revise the chapters taught in the class and solve the worksheet given below in your notebook.   2. Selected students will make a model on the given topics:  1. 3D structure showing Lok Sabha & Rajya Sabha chambers. 2. Flowchart or Model of the Law-Making Process 3. Human Rights Tree (with leaves representing various rights ) or Equality ladder (showing steps from inequality to social equality e.g., reservation policies, education access). |
| * 1. Prepare a project on the following topics:      1. The making of the Indian Constitution      2. Detailed structure, composition and functioning of any one organ of the Indian government – Legislature, Executive or Judiciary.      3. One Case-study about violation of any one or all of the values of equality, liberty and social justice.      4. Political Impact on Indian Legislation  General Instructions:  * + - * It should be a handwritten project to be made on A4 size sheets and submitted in a folder.       * The Project work should be of 15-20 pages.       * It should be well-researched, pictorial and informative.       * It should contain title page, acknowledgement, analysis, conclusion and bibliography.       * Relevant newspaper clippings, facts and figures should be included.  ASSIGNMENT Choose the most appropriate option for each of the following – 1. Which of the following is not a feature of the Indian Constitution? a) Parliamentary form of government b) Federal system c) Presidential form of government  d) Fundamental Rights 2. Which of the following is not a Fundamental Right? a) Right to Freedom b) Right to Property  c) Right to Equality d) Right to Constitutional Remedies  3. Which provision of the Indian constitution was passed without any debate?   * 1. Parliamentary system   2. Powers of Judiciary   3. Decentralized system   4. Universal Adult Suffrage   Answer the following questions-  1. Discuss the main functions of a Constitution.  2. Do you agree that the Constituent Assembly was a representative body? Give reasons for  your answer.  3. The Indian Constitution is a blend of rigidity and flexibility. Explain with the help of examples.  4. Discuss the importance of Fundamental Rights and Directive Principles of State Policy in the development of Indian democracy and people’s welfare.  5. In your opinion, which fundamental right is the most important and why? Discuss its provisions.  6. Do you think that the Right to Freedom should be restricted in the following situations? Give reasons to support your answer.  a) Women protested against the restriction on their entry into the Sabarimala temple.  b) Several Sikh leaders have mobilised a crowd to attack police stations demanding a  separate state for the Sikh community.  c) People have assembled for a peace march after communal riots in the city.  d) Hundreds of Adivasis blocked the road demanding that the land taken away from them  for construction of a mall be returned to them.  7. Can Fundamental Rights come in conflict with the Directive principles? Explain with  suitable examples.  8. Both male and female Indian cricketers play for the country with equal devotion but  there is a huge difference in their basic pay scale.  a. Which fundamental right is being violated here?  b. What are the remedies available? |
| **ECONOMICS**  **Date of submission: 1 July, 2025**  To be done in Economics Register. **MICROECONOMICS**  **A. Read the following hypothetical text and answer the given questions:**  Each economy has scarce resources and will have possibility of being exhausted gradually after a continuous use. Growth of resources, therefore, becomes a basic problem of the economy. It can achieve this objective through technological advancement. Under-developed countries like India, Pakistan, Thailand etc. have remained poor because of poor growth of their resources. Besides fuller utilization of resources, these countries should try to raise their productive capacities, by exploring further availability of natural resources and discovering better techniques for their use. Moreover, full use of productive capacity is also indispensable for the growth of the economy. Since economic theory is classified into Micro and Macro Theory. Microeconomic theory deals with the allocation of resources in the market economy. In this theory, decisions regarding ‘what’, ‘how’ and ‘for whom’ to produce are decided on the basis of price mechanism. Goods are freely bought and sold in the market economy on an agreed price. Macroeconomic theory deals with the fuller and efficient use of resources. It also deals with the growth of resources and problems relating saving, investment, inflation, unemployment etc. Development economics deals with the problem of growth of resource.  Q-1 Which is a central problem of an economy?  (a) Allocation of resources  (b) optimum utilization of resources  (c) Growth of resources  (d) all of these  Q-2 To which factor, economic problem is basically related to:  (a) Choice  (b) Consumer selection  (c) firm selection  (d) none of these  Q-3 Macro Economics deals with the ..........................  (a) Allocation of resources  (b) Aggregate use of resources  (c) both (a) & (b)  (d) none of these  **B. Numerical Questions**  1. A country produces only two goods: green chilli and sugar. Its production possibilities are shown in the following table. Plot the PPC on a graph paper and verify that it is concave to the origin. What is the pattern in the table that gives rise to the concave shape of the PPC?   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | Possibilities | A | B | C | D | E | F | | Sugar | 0 | 1 | 2 | 3 | 4 | 5 | | Green Chilli | 100 | 95 | 85 | 70 | 50 | 25 |   2. The following is a production possibility table for war goods and civilian goods:   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Combinations | A | B | C | D | E | | Automobiles (₹ 000s) | 0 | 1 | 2 | 3 | 4 | | Rifles (lacs) | 10 | 9 | 7 | 4 | 0 |   Show these production possibilities through a PPC. What do the points on the curve indicate?  Label point G inside the curve. What does this point indicate?  Label point H outside the curve. What does this point indicate?  What must an economy do to attain the level of production indicated by point H?  3. Given the production possibilities curve for rifles and automobiles:     1. Suppose improvement occurs in the technology of producing rifles and not in the production of automobiles. Draw the new PPC. 2. Now, assume that a technological advance occurs in producing automobiles and not in producing rifles. Draw the new PPC. 3. Finally, draw a PPC which reflects technological improvements in the production of both products.   4. A person’s total utility schedule is given below. Derive his marginal utility schedule   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | Amount consumed | 0 | 1 | 2 | 3 | 4 | 5 | | Total Utility (Units) | 0 | 10 | 25 | 38 | 48 | 55 |   5. Complete the following table:   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Units Consumed | 1 | 2 | 3 | 4 | 5 | | Total Utility | 25 | 45 | — | 70 | 75 | | Marginal Utility | 25 | — | 15 | — | — |   6. Complete the following indifference schedule of a consumer consuming bundles of two goods X and Y   |  |  |  |  | | --- | --- | --- | --- | | Combination | Good X | Good Y | MRSXY | | A | 1 | 15 | — | | B | 2 | — | 4 : 1 | | C | — | 8 | 3 : 1 | | D | 4 | 6 | — | | E | 5 | — | 1 : 1 |   **C. Subjective Questions**    1. Scarcity and choice go together. Do you agree? Justify your answer.  2. Although water is useful, yet it is cheap. On the contrary, diamond is not much of use, still it is very expensive. Give an economic reason for this paradox.  3. Explain the problem of ‘choice of techniques’ of production.  4. Draw a production possibility curve and show the following situations on the diagram.  (a) Full employment of resources  (b) Effect of widespread flood  (c) Use of advanced technology in production.  5. “Problem of resource allocation would not arise, if resources do not have alternative uses.” Defend or refute the statement with valid arguments.  **D. Model/chart/poster**  Prepare a neat and well-organized model or chart on the following Sustainable Development Goals (SDGs 8 to 12). The model/chart should be colorful, creative, and presented on A3 or chart paper. |
| APPLIED MATHEMATICS **Date of submission: 2 July,2025**  **Complete the following assignment in your Mathematics notebook.**   |  |  | | --- | --- | | 1 | The set (A ∩ B′)′ ∪ (B ∩ C) is equal to  (a) A′ ∪ B ∪ C (b) A′ ∪ B (c) A′ ∪ C′ (d) A′ ∩ B | | 2. | The range of the function is  (a) {4} (b) {–4} (c) {–1, 1} (d) any real number | | 3. | Let S = set of all points inside the square, T = the set of points inside the triangle and C = the set of points inside the circle. If the triangle and circle intersect each other and are contained in a square. Then  (a) S ∩ T ∩ C = ϕ (b) S ∪ T ∪ C = C  (c) S ∪ T ∪ C = S (d) S ∪ T = S ∩ C | | 4. | If [x]2 – 5[x] + 6 = 0, where [ ] denote the greatest integer function, then  (a) x ∈ [3, 4) (b) x ∈ [2, 3) (c) x ∈ [2, 3) (d) x ∈ [2, 4) | | 5. | In an examination, 80% students passed in Mathematics, 72% passed in Science and 13% failed in both the subjects, if 312 students passed in both the subjects. Find the total number of students who appeared in the examination. | | 6. | Let *f* : R → R be given by *f*(*x*) = *x*2 + 3 Find (*i*) {*x* : *f*(*x*) = 28} (*ii*) The pre-images of 39 and 2 under ‘*f* ’. | | 7. | If U = {*x* : *x* ≤ 10, *x* ∈ N}, A = {*x* : *x* ∈ N, *x* is prime}, B = {*x* : *x* ∈ N, *x* is even}, write A ∩ B′ in roster form. | | 8. | Draw the graph of ƒ(x) = |x-2|, x ε R. What are the domain and range of ƒ(x)=| x-2| | | 9. | (a) Relations R1 and R2 are defined on the set Z of integers as follows :  (*x*, y) ∈ R1 ⇔ *x*2 + *y*2 = 25 ; (*y*, *x*) ∈ R2 ⇔ *x*2 + *y*2 = 25  Express R1 and R2 as the sets of ordered pairs and hence find their respective domains.  (b) A relation R is defined from a set A = {2, 3, 4, 5} to a set B = {3, 6, 7, 10} as follows : (*x*, *y*) ∈ R ⇔ *x* divides *y*. Express R as a set of ordered pairs and determine the domain and range of R. | | 10. | Maths teacher explained the topics:  Method to Find the Sets When Cartesian Product is Given  For finding these two sets, we write first element of each ordered pair in first set say A and corresponding second element in second set B (say).  Number of Elements in Cartesian Product of Two Sets  If there are p elements in set A and q elements in set B, then there will be pq elements in AXB i.e. n(A) = p and n(B) = q, then n(A x B) = pq  Based on the above two topic, answer the following questions.  (i) If A x B = {(a, 1), (b, 3), (a, 3), (b, 1), (a, 2), (b, 2)}. Then, find A and B  (ii) If the set A has 3 elements and set B has 4 elements, then find the number of  elements in A x B  (iii)A and B are two sets given in such a way that A x B contains 6 elements. If  three elements of A x B are (1, 3), (2, 5) and (3, 3), then find A, B  (iv)The cartesian product P x P has 16 elements among which are found (a, 1) and (b, 2). Then, find the set P | | 11. | A, B and C are subsets of Universal Set If A = {2, 4, 6, 8, 12, 20}, B= {3,6,9,12,15}, C=    {5,10,15,20} and U is the set of all whole numbers, draw a Venn diagram showing the relation of U, A, B and C. | |
| PHYSICAL EDUCATION **Date of submission: 3 July, 2025**  **I**.To be done in Practical File  •Practical-1: Labelled diagram of 400 m Track & Field with computations.  •Practical-2: Describe Changing Trends in Sports & Games in terms of changes in Playing surface, Wearable gears, Equipment, Technological advancements.  •Practical-3: Labelled diagram of field & equipment of any one IOA recognised Sport/Game of choice.  **II**. Play any sport during summer vacation and note the changes in body (Muscular system) and write in your practical file.  **III**.Visit any sports complex nearby and write about the game specific changes in infrastructure of your specific game in your practical file.   1. Complete the following assignment in your Register    1. Define Physical Education.    2. What are the objectives of Physical Education?    3. How Physical Education develop neuro-muscular coordination?    4. How can Physical Education contribute in moral and character building?    5. How does Physical Education contribute to an individual’s mental development?    6. What are advantages of using technology in sports?    7. What are the career options an individual has after completion of professional course in Physical Education?    8. What is Khelo India Programme?    9. What is the need of sports competition in school? Discuss in details.    10. Apart from a professional degree in Physical Education, what other key skills are required for opting for career other than teaching?    11. MR. Ram, manager of Sports Company produces sports material of good quality. Following are the pictures of some of the sports goods he produces:   CBSE Sample Papers for Class 11 Physical Education Set 1 with Solutions 4  Look at the image carefully and fill in the given blanks: (A)Mr. Ram’s company produces the ……………………… equipment. (B) ……………………. are now preferred by professional athletes and amateur fitness enthusiasts for variety of activities. (C) ………………….. is the equipment, which protects from the head injury. (D) He also provide ………………………… for the people who are unable to walk. |