S2 History Practice Paper

S2 | History | Time: 60 minutes | Total: 100 marks | 24 questions

---

Part 1: The Renaissance and Humanism

Study the data below and answer the questions, showing all steps.

1. A {PG}-page book takes {PG} days to copy by hand, while a movable-type press prints {PD} pages a day. Find the number of days needed to print one copy and how many times faster printing is than hand copying, then explain the effect on the spread of knowledge.

Answer: Printing takes 300 / 50 = 6 days, so the press is 300 / 6 = 50 times faster. Printing slashed book prices and produced many identical copies, literacy rose and new ideas spread in months rather than years, which was the technological precondition for the Renaissance and the Reformation to spread quickly.

2. Florence had about 60000 people and its literacy rate rose from 10% to 25%. Find the number of literate people before and after, the increase and the percentage increase.

Answer: Before: 60000 x 10% = 6000; after: 60000 x 25% = 15000; the increase is 9000, that is 9000 / 6000 x 100% = 150%. The growth came mainly from merchants and craftsmen who read practical books in the vernacular instead of Latin classics, creating a new lay readership.

3. Leonardo left about 7000 pages of manuscripts and only 25% survive. Find the number of surviving pages and explain how a primary source differs in value from a later copy.

Answer: Surviving pages = 7000 x 25% = 1750. A primary source such as an original manuscript comes from the same period as the event and shows the language, technique and viewpoint of the time directly; a later copy keeps the content but passes through the copyist choices and errors, so it must be cross-checked against other evidence.

4. A fresco covers 200 m² at 15 florins per square metre, with 600 florins of materials. Find the gross and net income of the painter and the net share of gross income, then explain why patrons such as the Medici were willing to pay.

Answer: Gross = 200 x 15 = 3000 florins; net = 3000 - 600 = 2400 florins, which is 2400 / 3000 x 100% = 80% of gross. Patrons paid large sums to display family wealth and piety and to build political prestige through public art, so art became an instrument of power.

Part 2: The Reformation and the Printing Press

Study the data below and answer the questions, showing all steps.

5. Luther published the Ninety-five Theses in 1517 and was asked to recant at the Diet of Worms in 1521. Find the number of years between the two events and explain how printing spread the theses so quickly.

Answer: 1521 - 1517 = 4 years. The theses were written in Latin, quickly translated into German and reprinted by presses in many cities, so copies far exceeded what copying could supply. Princes, towns and universities read the same text at the same time and an academic dispute became a society-wide religious and political movement.

6. A press printed 300 leaflets, each read on average by 60 people. Find the total number of readers and explain why this figure is an estimate rather than an exact count.

Answer: Estimated readers = 300 x 60 = 18000. Circulation was never itemised, one person may read a leaflet several times and some copies were discarded or kept, so 60 per copy is only a sample average. The result (about eighteen thousand) is an order-of-magnitude estimate, not a census.

7. During the Reformation 12000 km² of church land was confiscated by princes, of which 35% was resold to nobles. Find the area resold and the area the princes kept, and explain the effect on the balance of power.

Answer: Resold = 12000 x 35% = 4200 km²; kept = 12000 - 4200 = 7800 km². Princes gained land revenue and bought noble support by distributing land, while the economic and political power of the church declined, so territorial princes replaced the church as the effective authority in religious matters.

8. A city of 25000 people was 40% Protestant and the rest Catholic. Find the number in each camp and explain the social problems that could arise where both groups lived together.

Answer: Protestants = 25000 x 40% = 10000.0; Catholics = 25000 - 10000.0 = 15000.0. Coexistence bred conflict over church property and places of worship, disputes over marriage and inheritance rites, and exclusion when civic offices were shared out by confession, which could escalate into riots or a divided city.

Part 3: The Age of Discovery and the Spice Trade

Study the data below and answer the questions, showing all steps.

9. Columbus reached the Americas in 1492; Magellan fleet left in 1519 and returned to Spain in 1522. Find the length of the circumnavigation and the number of years from the first Columbus voyage to the return of Magellan.

Answer: Circumnavigation = 1522 - 1519 = 3 years; the gap from 1492 to 1522 is 30 years. Magellan himself was killed en route and Elcano brought the remaining ship home, proving the globe could be sailed around and exposing the provisioning and disease costs of ocean voyages.

10. A sailing ship averages 4 knots (1 knot = 1 nautical mile per hour) for 36 days. Find the total distance in nautical miles and in kilometres (1 nautical mile = 1.852 km, answer to the nearest km), and explain why a sailing ship cannot sail a straight line.

Answer: Daily run = 4 x 24 = 96 nautical miles; total = 96 x 36 = 3456 nautical miles = 3456 x 1.852 = 6400.5 km, about 6401 km. A sailing ship follows the wind, tacks when the wind is against it and avoids calms and reefs, so the real track is far longer than a straight line and the days and provisions needed rise accordingly.

11. A pound of spice costs 1 ducat at source and sells for 8 ducats in Lisbon. Find the selling price as a multiple of cost and the profit margin, and explain how freight and risk shape that gap.

Answer: Multiple = 8 / 1 = 8 times cost; margin = (8 - 1) / 1 x 100% = 700%. The gap had to cover ships, crew, armament and spoilage and to pay for the risk of wreck and piracy, so although the margin was huge the expected return of a voyage still depended on the chance of loss.

12. A fleet left with 90 men and returned with 55. Find the number who died and the survival rate, and name the two commonest causes of death on such voyages.

Answer: Deaths = 90 - 55 = 35; survival rate = 55 / 90 x 100% = 61.1%. The commonest causes were scurvy from months without fresh fruit and vegetables (vitamin C deficiency) and infectious disease such as typhus and dysentery spreading through contaminated water, with storms and grounding adding further losses.

Part 4: The Scientific and Industrial Revolution

Study the data below and answer the questions, showing all steps.

13. An early steam engine burns 500 kg of coal an hour (calorific value about 30 MJ/kg) and delivers 2.4 GJ of useful work. Find the energy input in GJ and the thermal efficiency, and state where the rest of the energy goes.

Answer: Input = 500 x 30 = 15 MJ = 15 GJ; efficiency = 2.4 / 15 x 100% = 16%. About 84% of the energy left as waste heat through the condenser and chimney, with friction losses besides, so early engines were very inefficient yet still outperformed human and animal power.

14. A spinning jenny let one worker tend 8 spindles against 1 on a hand wheel. Find the multiple of output and explain why this moved spinning from the domestic system into factories.

Answer: Multiple = 8 / 1 = 8 times. The machine was bulky and needed water or steam power, so work was gathered in one place and paced by the machinery; workers who once owned their tools at home became wage earners on the employer clock, and the domestic system declined.

15. The 1830 Liverpool to Manchester railway was 56 km long and trains averaged 30 km/h. Find the journey time in minutes and compare it with a coach at about 10 km/h.

Answer: Journey time = 56 / 30 = 1.87 hours = 112 minutes, against 56 / 10 = 5.6 hours (about 336 minutes) by coach, saving roughly 224 minutes. Raw materials and finished goods could move daily, market reach widened and freight costs fell, creating a single closely linked national market.

16. An industrial city grew from 1.0 million to 2.4 million people. Find the growth rate and state two public health problems caused by rapid urban growth.

Answer: Growth = (2.4 - 1.0) / 1.0 x 100% = 140%. Two problems: first, overcrowded housing with no proper sewers mixed waste with drinking water, so cholera and typhus recurred; second, coal smoke from factories and homes polluted the air and, with long hours and poor diet, tuberculosis and occupational disease were widespread.

Part 5: Imperialism and Colonies

Study the data below and answer the questions, showing all steps.

17. After the Berlin Conference (1884-85) Europe partitioned Africa. By 1914 about 90% of the 30.3 million km² of Africa was under colonial rule. Find the colonial and nominally independent areas and explain the effect of the principle of effective occupation.

Answer: Colonial area = 30.3 x 90% = 27.27 million km²; the rest = 30.3 - 27.27 = 3.03 million km². Effective occupation required real troops and administration, so powers raced to send expeditions, build posts and sign treaties, carving unclaimed interior into possessions and speeding the partition the rule was meant to regulate.

18. The Suez Canal opened in 1869 and cut the London to Bombay route from 19800 km to 11600 km. Find the distance saved and the percentage saved, and explain what the canal meant for British strategy.

Answer: Saved = 19800 - 11600 = 8200 km, that is 8200 / 19800 x 100% = 41.4%. The shorter route moved troops and mail to India faster with less coal, so Britain treated the canal as an imperial lifeline, buying shares in the canal company in 1875 and occupying Egypt in 1882 to secure control.

19. The Treaty of Nanjing (1842) required China to pay an indemnity of 21 million silver dollars in 4 annual instalments. Find the average annual payment and name two other main terms of the treaty.

Answer: Annual payment = 21 / 4 = 5.25 million dollars. Two other terms: cession of Hong Kong Island, and the opening of five treaty ports (Guangzhou, Xiamen, Fuzhou, Ningbo, Shanghai) with the guild monopoly abolished and foreigners allowed to reside there. The indemnity was met from customs revenue, tying Qing finances to foreign control.

20. A colony imported 110 million yards of British cotton a year, rising to 220 million while local handloom output halved. Find the percentage rise in imports and explain the long-term effect on the colonial economy.

Answer: Rise = (220 - 110) / 110 x 100% = 100%. In the long run cheap machine goods destroyed local handicrafts, artisans returned to farming and the colony became an exporter of raw materials (cotton, jute) and an importer of manufactures, leaving a single-track economy highly exposed to the metropolitan market and to price swings.

Part 6: The Two World Wars and the Post-war Order

Study the data below and answer the questions, showing all steps.

21. The First World War ran from 1914 to 1918 and the Second from 1939 to 1945. Find the length of each war and their total, and state how long the peace between them lasted.

Answer: First World War = 1918 - 1914 = 4 years; Second World War = 1945 - 1939 = 6 years; total 10 years. From the 1918 armistice to the outbreak in 1939 the peace lasted only about 21 years, with the punitive terms of Versailles and the Great Depression of the 1930s as the two main backgrounds to its collapse.

22. On the first day of the Somme in 1916 about 120000 British soldiers took part and 57470 became casualties. Find the casualty rate to one decimal place and the number still fit for action, and explain why trench warfare produced such a huge single-day loss.

Answer: Casualty rate = 57470 / 120000 x 100% = 47.9%; still fit for action = 120000 - 57470 = 62530. Machine guns, barbed wire and deep trenches gave the defence layered positions, so attackers had to cross open no man land under fire while the bombardment failed to destroy shelters; poor communications prevented coordination, concentrating the loss in the first few hours.

23. The Treaty of Versailles (1919) set German reparations at 132 billion gold marks. If Germany paid 2 billion a year, find how many years it would take and explain the economic and political consequences of the arrangement.

Answer: Years needed = 132 / 2 = 66. The payments had to be made in gold and foreign currency, so Germany printed money, hyperinflation destroyed middle-class savings in 1923, and the Dawes Plan loans from the United States kept it afloat until the 1929 slump cut the flow, leaving unemployment and resentment on which extremist parties thrived.

24. Deaths in the Second World War are estimated at about 70 million against a 1940 world population of about 2300.0 million. Find deaths as a percentage of world population to two decimal places and explain why the United Nations was founded after the war.

Answer: Percentage = 70 / 2300.0 x 100% = 3.04%. The League of Nations had failed to stop aggression, partly because the United States never joined and it lacked enforcement power, so the new body was given a Security Council, collective security, arbitration and sanctions to prevent another general war and to handle refugees, food and reconstruction across borders.
