Part I: Multiple choice test

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. According to the “Viking” hypothesis – when was Svalbard discovered?</td>
<td>☒ 1194, ☐ 1545, ☐ 1596</td>
</tr>
<tr>
<td>2. When did whaling start at Spitsbergen?</td>
<td>☐ ca. 1580, ☒ 1610, ☐ ca. 1640</td>
</tr>
<tr>
<td>3. Who started winter hunting and trapping?</td>
<td>☐ Norwegians, ☒ British, ☐ Russians</td>
</tr>
<tr>
<td>4. About when did the systematic scientific exploration of Svalbard start?</td>
<td>☐ ca. 1760, ☒ ca. 1860, ☐ ca. 1910</td>
</tr>
<tr>
<td>5. When did Nobile’s ill-fated expedition with the airship “Italia” take place?</td>
<td>☐ 1909, ☐ 1926, ☒ 1928</td>
</tr>
<tr>
<td>6. The Polish research station in Hornsund was set up during the International Geophysical Year. When did it take place?</td>
<td>☐ 1882-83, ☐ 1932-33, ☒ 1957-58</td>
</tr>
<tr>
<td>7. When was the Svalbard reindeer protected?</td>
<td>☒ 1925, ☐ 1952, ☐ 1973</td>
</tr>
<tr>
<td>8. In what “city” was year-round coal mining run for the first time in Svalbard?</td>
<td>☒ Advent, ☐ Longyear, ☐ Grumant</td>
</tr>
<tr>
<td>10. When was the Svalbard Treaty signed?</td>
<td>☒ 1920, ☐ 1925, ☐ 1930</td>
</tr>
<tr>
<td>11. When was Store Norske nationalized by the State?</td>
<td>☐ 1963, ☒ 1976, ☐ 1989</td>
</tr>
<tr>
<td>12. When was local democracy (Lokalstyre) introduced in Longyearbyen?</td>
<td>☐ 1975, ☐ 1991, ☒ 2002</td>
</tr>
</tbody>
</table>

Part II: Essay (two alternatives)

A. Svalbard and the polar expeditions

There are a good dozen of north polar expeditions using Svalbard as point of departure. Examples might be taken from the list below, which was presented in lecture 6. These expeditions rank among the best known and are often referred to in the literature. The candidate is not expected to discuss all of them, but a satisfactory answer should include at least 5–6 expeditions representing different periods and approaches.

1. **1764–66: Chichagov (RU)**  
   Russian Navy ships in 1765 and 1766, search for a sea-route across the North Pole. Inspired by Lomonosov. Reached little more than 80°. Established a wintering station in Recherchefjorden, which may be considered the first scientific station on Svalbard.

2. **1773: Phipps (GB)**  
   Royal Navy, 2 ships, “Racehorse” and “Carcass”. Led by capt. C. John Phipps. Typical “farthest north”-expedition, but also had a scientific program. Nearly wrecked at Sjuoyane when the ships froze in, but managed to return safely.
3. **1818: Buchan & Franklin (GB)**
   Similar expedition as above. The two ships did not reach far north, but were forced to seek shelter in Magdalenefjorden.

4. **1827: Parry (GB)**
   Parry was a Navy captain and a hero of the N.W. Passage. He introduced a new concept: man-hauled boat-sleds. Experiment with reindeer pulling failed. Reached 82°40’ sledding over the ice, which was a new official record.

5. **1868: Nordenskiöld (S)**
   The scientist Nordenskiöld’s first serious attempt to reach far north. Used an ice-reinforced steam ship, “Sofia”, and made two attempts to force through the drift-ice. Nearly wrecked at 81°, but returned safely to Spitsbergen.

6. **1872–73: Nordenskiöld (S)**
   Second attempt. Planned to use reindeer-pulled sleds, but reindeer escaped during wintering at station “Polhem” in Mosselbukta. Instead they used man-hauled sleds. Difficult ice-ridges north of Sjuøyane forced them to return, crossing Nordaustlandet as the first on their way back.

7. **1894: Wellman (US)**
   American journalist Walter Wellman hired steel steamer “Ragnvald Jarl” in Norway, but wrecked and lost the ship south of Sjuøyane.

8. **1896–97: Andrée (S)**
   Andrée was the first to use an aircraft: hydrogen balloon “Örnen”. First trial in 1896 failed; they never lifted off. Second attempt in July 1897. Balloon crashed at 82°56’, and the three on board started to march south over the ice. Eventually ended up on Kvitøya, where all perished in October.

   Inspired by Andrée and developments in aeronautics, Wellman had airship “America” constructed in France. Made two attempts to fly to the Pole from Virgohamna, in 1907 and 1909. Both expeditions failed conspiquously.

10. **1925: Amundsen-Ellsworth (N/US)**
    Aircrafts developed rapidly during and after W.W. 1. With financial aid from Ellsworth Amundsen bought 2 Dornier-Wal flying-boats, “N24” and “N25”. Took off from Ny-Ålesund in spring 1925. Emergency landing at nearly 88° N., a new farthest north record. After 3 weeks of struggle they managed to fly back to Nordaustlandet in one plane and were all rescued.

11. **1926: Amundsen-Ellsworth-Nobile (N/US/I); Byrd-Bennet (US)**
    Seeing that airplanes were unreliable, Amundsen decided to try a modern airship, constructed by Nobile. The “Norge” expedition was a successful transpolar flight from Ny-Ålesund to Teller, Alaska. However, the expedition was “beat” in the North Pole race by Americans Byrd & Bennet in their fixed-wing airplane. They started from Ny-Ålesund a few days earlier and claimed to have reached the pole, a claim which later has been brought in doubt.
Nobile and Amundsen fell out after the “Norge” expedition, and Nobile decided to make his own trial with his airship “Italia”. Flew all the way from Rome to Ny-Ålesund and made two successful flights to Greenland and Franz Josef land before setting off to the Pole. Airship crashed during return from the pole, and half of the crew perished. A huge rescue operation was set in motion, and Nobile and some of the men were rescued.

These expeditions range over 130 years and show various approaches: sailing ships with large crews, steam ships, sledges hauled by men (or possibly reindeer), balloons, airships and airplanes. Only aircrafts proved successful – to a limited degree – in north polar expeditions from Svalbard. Going through or over the ice was nearly impossible, due to the ice-drift; Peary went from Canada to the Pole and back, and used traditional inuit methods with dogs. We see new technology being pushed to extremes at Svalbard; the ships and aircrafts were hardly true and tested for the severe Arctic conditions.

Svalbard became a point of departure for various reasons. First, it is located at a high latitude. Second, there was a certain local infrastructure that made logistics easier. In the 20th century obviously telegraph communications made Svalbard popular – the expeditions were also big media events.

In the long perspective the north polar expeditions did not achieve very much for science, apart from confirming that the Arctic Ocean was ice covered and void of land. Although they provided some entertainment, and still do, they had little influence on the developments on Svalbard, save perhaps for tourism. In that sense their historical significance is rather small.

B. Coal mining on Svalbard
Whalers of the 17th century were aware that coal and other minerals were to be found on Svalbard, but did not exploit these resources. Hunters and trappers may sometimes have used local coal too, and the “gentleman tourist” James Lamont dug bunker coal in Kongsfjorden and Adventfjorden for his ship “Diana” in 1869. Commercial production, however, came later, spurred by rapid industrialization in Europe.

In 1899 the sealing captain Søren Zakariassen mined around a ton of coal at Bohemanneset and Heerodden in Isfjorden, some of which was sold locally, and the rest in Tromsø. He also initiated a number of small coal companies in Norway that sent prospecting expeditions to Svalbard and claimed coal fields in the first years of the 20th century. One of these fields, on the north side of Adventfjorden, was bought by a British company, The Spitsbergen Coal & Trading Co., which carried out the first year-round production in 1905–08. The operation then closed down due to lack of resources, labour conflicts, technical and financial problems.

In the decade before World War I a number of individuals and companies were active at Svalbard, prospecting for minerals and claiming areas. Since this was still a no man’s land, property rights could not be confirmed or conflicts resolved by state authorities. Before 1914 only the Arctic Coal Co. (US) was able to start a sizeable production. In Longyeardalen they established a mine that eventually employed 2–300 people in winter time and had a production capacity of around 50,000 tons of coal per year. In 1915 the mine was closed due to the problems of the war.

During W.W. I most of the mining activity was abandoned, but new Norwegian companies were formed in 1916–17. One of them, the Store Norske Spitsbergen Kullkompani, bought the estates and mines of ACC. After the war also Dutch (Barentsburg), British-Russian
(Grumant) and Swedish (Svea) companies started mining, but had to give in during the economic crisis in the 1920s. The implementation of the Svalbard Treaty and the Mining Code in 1925 provided a legal framework, but did not stimulate further industrialization. From 1930 only Store Norske and the Soviet Trust Arktikugol continued coal mining – in Longyearbyen, Barentsburg and Grumant. The other mines on Svalbard had been closed down, permanently or temporarily.

Svalbard was evacuated in 1941 due to the war, and in 1943 German ships bombed and heavily destroyed the mines. In 1945 reconstruction started, now including Ny-Ålesund, Svea and Pyramiden. Recurring marked crises and economic problems made coal mining unprofitable, but for political reasons it was important to uphold activity – for Norway as well as for the USSR. There were no real alternatives to coal mining. In 1976 Store Norske was nationalized, and a modernization process in Longyearbyen started. From the 1990s the economy has diversified significantly. Still, coal mining is very important: from 2001 Store Norske has been able to produce profitably (i.e. without state subsidies) in Svea Nord, using high-end technology.

Not only has coal mining been important for local communities on Svalbard, it was the very reason why they were established. A commercial, industrial mining needed permanent presence to keep up production on a year-round basis. Being isolated for many months during the winter the communities had to be self-supplied with equipment and provisions, and also had to rely on their own skills and competence. Therefore, the mining camps had to develop to a certain size and variety to be able to operate.

The Mining Code (Bergverksordningen) contains regulations that require the companies to cater for the material needs of their workers, including health and education services. In Longyearbyen and Ny-Ålesund, for example, the coal companies owned and ran the hospital and the school. In lack of public services before the 1970s, the companies were the community to a large extent – hence the expression “company town”. This also implies that the companies had great influence over the lives of their employees. By using seasonal contracts management could effectively control the work force.

Another obvious consequence of the “company town” model was that the communities were dominantly male; miners were to a large degree young, single males. There were few workplaces for women and a limited offer of family housing, and there also few children. The Soviet settlements had only a slightly higher proportion of women and children.

The local communities Barentsburg, Pyramiden and Longyearbyen were all modernized from the 1970s and living standards improved. But while the Soviet settlements remained company towns, Longyearbyen developed differently. Public services increased, and also a private service sector started growing. From the 1990s this was particularly evident. Thus the relative influence of the Store Norske decreased. However, the modernization and differentiation of Longyearbyen would not have been possible without the infrastructure provided by coal mining and the stabilizing effect of the industry.

The political function of coal mining on Svalbard can hardly be overrated. The coal resources were a major factor behind the national interests involved in the beginning of the 20th century and the negotiations about the legal status and administration of the archipelago. Even though mining has not been profitable for most of the period after 1920 and has gone through a series of crises, it has been continued as a basis for presence and local settlement – which was politically motivated. This is true both for Russia and Norway’s involvement and particularly important after World War II. Until recently (1990s) no other activity has been able to support stable and permanent activity to the same degree as coal mining. This is why the mining has continued in spite of failing economic results.