Part I: Multiple choice test. Make only one cross for each question.

1. Barentz lead three Arctic expeditions. During which was Bjornoya discovered?  
   ☐ 1594 ☐ 1595 ☒ 1596
2. Which nation started whaling at Svalbard?  
   ☒ England ☐ Netherlands ☐ France
3. When did regular Norwegian winter hunting and trapping on Svalbard begin?  
   ☐ ca. 1780 ☒ ca. 1820 ☐ ca. 1890
4. When did Russian hunting and trapping end for good?  
   ☐ ca. 1820 ☒ ca. 1850 ☐ ca. 1890
5. When did the Russian Chichagov-expedition take place?  
   ☒ 1764-66 ☐ 1838-39 ☐ 1871-72
6. When did the first International Polar Year take place at Svalbard?  
   ☒ 1882-83 ☐ 1932-33 ☐ 1957-58
7. How many times did Walter Wellman attempt to reach the North Pole by airship?  
   ☐ 1 ☒ 2 ☐ 3
8. When did year-round mining on Svalbard begin?  
   ☒ 1899 ☐ 1905 ☐ 1909
9. Which of these nations has not done coal mining on Svalbard?  
   ☒ Sweden ☐ Netherlands ☐ Denmark
10. When was the Mining Code for Svalbard put into force?  
    ☒ 1920 ☐ 1925 ☐ 1927
11. When were the first large national parks and nature reserves on Svalbard established?  
    ☒ 1973 ☐ 1975 ☐ 1978
12. When did the airport in Longyearbyen open?  
    ☒ 1963 ☐ 1971 ☐ 1975

Part II: Choose and answer one of the following questions:

A. The International Polar Year

The International Polar Year (IPY) has long traditions. Describe the background for the initiative and discuss the role Svalbard has played through the history of IPY.

Until the second half of the 19th century scientific activity in the Polar regions was unsystematic and focussed on geographical exploration rather than basic research. However, natural sciences were becoming more advanced and specialized at this time. Having returned from the “Tegetthoff” expedition in 1872-74, during which Franz Josef Land was discovered, Karl Weyprecht (1838-81) formulated a new program for future polar research. He dismissed what he called “Arctic topography” and the search for honour and glory, and advocated instead international scientific cooperation to gather systematic, synoptic observations during a whole year. Together with Georg Neumayer he presented these ideas during the 2nd congress of the International Meteorological Organization in Rome, 1879. This lead to the establishment of an international polar committee headed by Neumayer, which immediately started planning of an International Polar Year (IPY). National committees were formed in many countries, which took on the responsibility to establish and run observation stations.

The first IPY took place in 1882-83. There were 12 stations in the Arctic, three in the Sub-Antarctic, all making synchronous geophysical observations according to a detailed fixed program. On Svalbard the station was operated by the Swedish Academy of Science and
placed at Kapp Thordsen in Isfjorden. At this time, the Swedes dominated Svalbard research and prominent scientists like Otto Torell and A.E. Nordenskiöld had already carried out a number of expeditions. The wintering at Kapp Thordsen was uneventful, but successful from a scientific point of view and proved that Svalbard was a very suitable platform for Arctic research.

In 1932-33 the 2nd IPY was carried through. Due to the economic crisis in the inter-war period, the activity was not so extensive this time. Again, the Swedes operated a station on Svalbard, or rather two. One station was built on the peak of Nordenskiöldtoppen (1050 m a.s.l.) near Longyearbyen and manned by three men through the winter. Another station for meteorological and aurora observations was set up in Sveagruva. The Norwegian meteorological stations on Svalbard (Kapp Linné, Bjørnøya) also took part in the observation program.

The International Geophysical Year (IGY) in 1957-58 was an extension of the IPY, both geographically and scientifically. However, the polar areas and particularly Antarctica were still important in this global program, which involved 67 nations and some 60,000 persons. On Svalbard two new stations were built: one in Kinnvika on Nordaustlandet, which was a joint effort by Sweden, Finland and Switzerland. In Hornsund on south Spitsbergen the Polish Academy of Science put up a station. Both were operated continuously during the IGY, and also the following year, albeit with a reduced program. The Kinnvika station was then abandoned, but the Poles continued to use Hornsund, mostly in summer. From 1978 the Polish station in Isbjørnhamna has been manned through the year.

During the current IPY 2007-08 there is a lot of international research activity on Svalbard – much more than during previous IPYs. This has obviously to do with the development of Svalbard as a convenient platform – because of its location in the High Arctic, its infrastructure, communications and relatively good climate, scientists can work here more effectively and at a significantly lower cost than in most other polar areas. Also the fact that the Svalbard Treaty provides accessibility and equal opportunities for research is an important factor.

The IPY has always had, and still has, an emphasis on geophysics: meteorology, aurora, earth and air electricity and magnetic field studies. Over time the scientific field has broadened, including for instance atmospheric chemistry, glaciology and ocean studies. As would be expected the current IPY focuses on climate change.

B. The Discovery of Svalbard

There are different opinions about when and how Svalbard was discovered. Describe the most important hypotheses that have been put forward and the sources they build on. Discuss how national traditions and interests have influenced the discussion.

In 1594, 1595 and 1596 Dutch expeditions were sent out to search for a North East Passage. The navigator Willem Barentsz took part in all three, and during the first he sailed far north along the west coast of Novaya Zemlya. In 1596 a more easterly course was chosen, based on advice from Plancius. On the 9th or 10th of June Bjørnøya (Bear Island) was discovered. Continuing north the two ships met the pack ice at 80°. Having turned east and south they sighted – and named – the North West corner of Spitsbergen on 17 June. Sailing southwards Barentsz made an outline map of the coast. Back at Bjørnøya the two ships parted; Jan Cornelisz Rijp’s ship went north again before returning home, while Barentsz turned east, eventually reaching Novaya Zemlya. In late August the ship froze in and the crew of 17 had to move ashore and winter on 76° north. Five men, including Barentsz, died during the winter
and spring, but the remaining 12 managed to row and sail back to Russia, where they met a Dutch ship. In late October they were back in Holland.

The map that was published a year after Barentsz’ death in 1597, as well as Gerrit de Veer’s (1598) famous account of the expedition, leave no doubt that the land discovered was Svalbard, or more precisely the north-western tip of Spitsbergen – the largest of the islands in the Svalbard archipelago. Parts of what seems to be Barentsz’ original logbook was published in 1613 by Hessel Gerritsz. Spitsbergen was the name the expedition soon attributed to the land, although on the map from 1598 it is called “Het Nieuwe Land” – the new land. The map also shows that Barentsz and his colleagues traced the west coast of Spitsbergen before they sailed southwards again to Bjørnøya, which they had already discovered a week earlier on their way up.

The Dutch discovery in June 1596 is thus a historical fact. Thus Barentsz’ discovery is only a hypothesis in the sense that it maintains that the Dutch actually were the first. There are three alternative hypotheses:

- **The “Stone Age” hypothesis:**
The possibility of pre-historic settlement was put forward as early as the the late 19th century (C.S. Hansson, 1899), but systematic archaeological investigations began only in the 1950s. Based on interpretations finds of flint fragments archaeologists Christiansson and Simonsen in 1970 suggested the existence of a Neolithic (3000 BC) settlement on Svalbard. Other archaeologists have rejected this hypothesis, first and foremost because there is no evidence of settlement or dwellings. In 1997 a large archaeological field project was carried out in the Bellsund area, and previous flint finds were also re-examined (H.B. Bjerck). The project concluded negatively with regard to a Stone Age settlement.

- **The “Viking” hypothesis:**
Icelandic annals record “Svalbard found” in the year 1194, and there is also mention of a “Svalbard” in sailing directions from the 13th century. Furthermore, a mythical Svalbard is mentioned in some parts of the saga literature. It is, however, not established that this corresponds to the islands we today call Svalbard, even though that has been a popular theory in Norway, endorsed by among others Fridtjof Nansen. No material evidence (graves, objects, settlements) has yet been found on Svalbard to substantiate this idea. On the other hand, it is probable that Norse sailors possessed the navigation capabilities required to sail in Arctic waters.

- **The “Pomor” hypothesis:**
Russian historians and archaeologists argue that Pomor trappers exploited Svalbard long before Barentsz. This hypothesis was presented – not coincidentally – already in the late 19th century, at the same time as Norwegians “rediscovered” the Norse Svalbard. Written evidence is scarce and requires interpretation. Archaeologist V.F. Starkov has dated timber in Pomor sites on Svalbard to mid 16th century and also made other finds he believes corroborate this hypothesis, such as inscriptions and objects believed to be of 16th century origin. Most western scientists have been sceptical towards the evidence. Dendrochronology is an accurate way of dating wood under certain conditions, but it remains to be proved that the buildings themselves were erected on Svalbard shortly after the timber was cut. The Pomors probably did have the experience and ship technology to sail to Svalbard in the 16th century; after all, they went to Novaya Zemlya and regularly navigated in Arctic waters.

Among the existing hypotheses about the discovery of Svalbard, it is only the “Stone Age” hypothesis that does not have a relation to national history traditions. The “Barentsz”
tradition in the Netherlands does not rule out earlier visits, but underlines the uniqueness of
the Dutch discovery. The “Viking” and “Pomor” hypotheses, on the other hand, are clearly
linked to cultural nationalism in Norway and Russia respectively. Before 1920 (the Svalbard
Treaty) it was important to find evidence that could underpin a future claim to sovereignty, or
at least construct an image of traditional usage. After the sovereignty issue was solved by
Norway’s take-over in 1925, the question of first discovery has had few or no political or
legal implications. Hence, it is more a question of national pride and prestige.