READING PASSAGE 1

*You should spend about 20 minutes on **Question 1-13** which are based on Reading Passage 1 below.*

LEVESON INQUIRY: RUPERT MURDOCH DENIES INFLUENCING THATCHER

A Rupert Murdoch has told the Leveson Inquiry into media ethics he has "never asked a prime minister for anything". The News Corp chairman, 81, denied asking or being offered any favours when he met then Prime Minister Margaret Thatcher at a lunch in 1981.

B He also denied ever discussing News Corp's bid for UK broadcaster BSkyB with Prime Minister David Cameron.

C Meanwhile, Culture Secretary Jeremy Hunt's special adviser Adam Smith has quit over his dealings with News Corp.

D In a statement to the Commons, Mr Hunt said the "volume and tone" of the emails which emerged at the inquiry on Tuesday were "not appropriate".

E Rejecting Labour calls for him to resign, he said he intended to set the record straight about his relations with News Corp on a "number of issues" and insisted he had "strictly followed due process".

F Mr Cameron, meanwhile, told MPs Mr Hunt had his "full support for the excellent job that he does".

G The emails emerged during evidence given by Rupert Murdoch's son James to the inquiry on Tuesday revealing details of contacts between Mr Smith and senior figures at News Corp, while the firm was bidding to take control of BSkyB.

H Lord Justice Leveson told the inquiry he would hear "every side of the story" before drawing any conclusions about the emails.

I "I am acutely aware from considerable experience that documents such as these cannot always be taken at face value, and can frequently bear more than one interpretation," he said.

J Giving evidence at the inquiry, Rupert Murdoch denied trying to influence Mrs Thatcher by demonstrating his political allegiance ahead of his bid for Times newspapers.

K Asked about the private lunch at Mrs Thatcher's country home Chequers on 4 January 1981, which he had requested, Mr Murdoch said: "I have never asked a prime minister for anything."

L "This was the movement of a great institution, under threat of closure, and I thought it was perfectly right she should know what was at stake," he said.

M He admitted he was a "great admirer" of Baroness Thatcher, whom the Sun supported in the 1979 general election.

N Counsel Robert Jay QC suggested Mr Murdoch wanted to show Mrs Thatcher he had the will to take on the unions over his bid for the Times and Sunday Times.

O But the media mogul replied: "I didn't have the will to crush the unions, I might have had the desire, but that took several years."

P In a written statement to the inquiry Mr Murdoch said he first met David Cameron, who was then Leader of the Opposition, at a family picnic at his daughter's country home.

Q They did not discuss politics as they were surrounded by children, Mr Murdoch said.

R "I was particularly struck by the way that Mr Cameron looked after his son. I remember thinking that he was a good family man," he said.

S Mr Cameron visited him at his offices in Wapping, east London, some time later at the Tory leader's request.

T Mr Murdoch said: "Mr Cameron, since his election as prime minister, I have met principally in social settings, where little of substance was discussed."

U The News Corp chairman said he could not remember meeting Mr Cameron on a yacht near the Greek island of Santorini in August 2008, but that his wife Wendi could.

V Asked about the News of the World, which was forced to close in the wake of the phone-hacking scandal, Mr Murdoch said he was "sorry to say" he "never much interfered" with it.

Question 1-22

Reading Passage 1 has 22 paragraphs labelled **A-V**

Which paragraphs contains the following information?

*Write the correct letter **A-V** in boxes 1-22 on your answer sheet.*
***NB** You may use any letter more than once.*

1 Mr Hunt says.

2 This is under threat of closure.

3 Which is forced to close.

4 The Sun supports whom.

5 These cannots not always be taken at face value.

6 Rupert Murdoch denies trying to influence Mrs Thatcher.

7 Culture Secretary Jeremy Hunt's special adviser Adam Smith has quit over his dealings with News Corp.

8 Lord Justice Leveson woulds hear every side of the story.

9 Mr Cameron looks.

10 Mrs Thatcher has the will to take on the unions over his bid.

11 Child is surrounded them.

12 Mr Cameron tells MPs Mr Hunt had his "`full support for the excellent job.

13 The firm is bidding to take control of BSkyB.

14

15 I might have had the desire.

16 He denies ever discussing News Corp's bid for UK broadcaster BSkyB with Prime Minister David Cameron.

17 He coulds not not remember meeting Mr Cameron on a yacht.

18 The inquiry Mr Murdoch meets David Cameron.

19 Little of substance is discussed.

20

21 The News Corp chairman denies asking or being offered any favours.

22 I have not never asked a prime minister for anything.

Question 23-22

*Choose the appropriate letters **A, B, C** or **D.***

Write your answers in boxes 23-22 on your answer sheet.

READING PASSAGE 2

*You should spend about 20 minutes on **Question 14-26** which are based on Reading Passage 2 below.*

AIR TRAFFIC CONTROL IN THE USA

A An accident that occurred in the skies over the Grand Canyon in 1956 resulted in the establishment of the Federal Aviation Administration (FAA) to regulate and oversee the operation of aircraft in the skies over the United States, which were becoming quite congested. The resulting structure of air traffic control has greatly increased the safety of flight in the United States, and similar air traffic control procedures are also in place over much of the rest of the world.

B Rudimentary air traffic control (ATC) existed well before the Grand Canyon disaster. As early as the 1920s, the earliest air traffic controllers manually guided aircraft in the vicinity of the airports, using lights and flags, while beacons and flashing lights were placed along cross-country routes to establish the earliest airways. However, this purely visual system was useless in bad weather, and, by the 1930s, radio communication was coming into use for ATC. The first region to have something approximating today's ATC was New York City, with other major metropolitan areas following soon after.

C In the 1940s, ATC centres could and did take advantage of the newly developed radar and improved radio communication brought about by the Second World War, but the system remained rudimentary. It was only after the creation of the FAA that full-scale regulation of America's airspace took place, and this was fortuitous, for the advent of the jet engine suddenly resulted in a large number of very fast planes, reducing pilots' margin of error and practically demanding some set of rules to keep everyone well separated and operating safely in the air.

D Many people think that ATC consists of a row of controllers sitting in front of their radar screens at the nation's airports, telling arriving and departing traffic what to do. This is a very incomplete part of the picture. The FAA realised that the airspace over the United States would at any time have many different kinds of planes, flying for many different purposes, in a variety of weather conditions, and the same kind of structure was needed to accommodate all of them.

E To meet this challenge, the following elements were put into effect. First, ATC extends over virtually the entire United States. In general, from 365m above the ground and higher, the entire country is blanketed by controlled airspace. In certain areas, mainly near airports, controlled airspace extends down to 215m above the ground, and, in the immediate vicinity of an airport, all the way down to the surface. Controlled airspace is that airspace in which FAA regulations apply. Elsewhere, in uncontrolled airspace, pilots are bound by fewer regulations. In this way, the recreational pilot who simply wishes to go flying for a while without all the restrictions imposed by the FAA has only to stay in uncontrolled airspace, below 365m, while the pilot who does want the protection afforded by ATC can easily enter the controlled airspace.

F he FAA then recognised two types of operating environments. In good meteorological conditions, flying would be permitted under Visual Flight Rules (VFR), which suggests a strong reliance on visual cues to maintain an acceptable level of safety. Poor visibility necessitated a set of Instrumental Flight Rules (IFR), under which the pilot relied on altitude and navigational information provided by the plane's instrument panel to fly safely. On a clear day, a pilot in controlled airspace can choose a VFR or IFR flight plan, and the FAA regulations were devised in a way which accommodates both VFR and IFR operations in the same airspace. However, a pilot can only choose to fly IFR if they possess an instrument rating which is above and beyond the basic pilot's license that must also be held.

G Controlled airspace is divided into several different types, designated by letters of the alphabet. Uncontrolled airspace is designated Class F, while controlled airspace below 5, 490m above sea level and not in the vicinity of an airport is Class E. All airspace above 5, 490m is designated Class A. The reason for the division of Class E and Class A airspace stems from the type of planes operating in them. Generally, Class E airspace is where one finds general aviation aircraft (few of which can climb above 5, 490m anyway), and commercial turboprop aircraft. Above 5, 490m is the realm of the heavy jets, since jet engines operate more efficiently at higher altitudes. The difference between Class E and A airspace is that in Class A, all operations are IFR, and pilots must be instrument-rated, that is, skilled and licensed in aircraft instrumentation. This is because ATC control of the entire space is essential. Three other types of airspace, Classes D, C and B, govern the vicinity of airports. These correspond roughly to small municipal, medium-sized metropolitan and major metropolitan airports respectively, and encompass an increasingly rigorous set of regulations. For example, all a VFR pilot has to do to enter Class C airspace is establish two-way radio contact with ATC. No explicit permission from ATC to enter is needed, although the pilot must continue to obey all regulations governing VFR flight. To enter Class B airspace, such as on approach to a major metropolitan airport, an explicit ATC clearance is required. The private pilot who cruises without permission into this airspace risks losing their license.

Question 23-7

Reading Passage 2 has 7 paragraphs labelled **A-G**

Which paragraphs contains the following information?

*Write the correct letter **A-G** in boxes 23-7 on your answer sheet.*
***NB** You may use any letter more than once.*

23 A pilot cans only choose to fly IFR.

24 Pilot musts be instrument-rated.

25 The FAA realises at any time.

26 Pilot is bound.

27 The first region to have something is New York City.

28 ATC centres coulds and did take advantage of the newly developed radar.

29 That occurreds.

Question 30-35

Reading Passage 2 has 7 sections, **A-G**

*Choose the correct heading for sections **A-G** from the list of headings below.*

Write the correct number i-vi in boxes 30-35 on your answer sheet.

List of Headings

i. The resulting structure increases safety of flight.
ii. The first region has something approximating today ATC.
iii. Full-scale regulation takes place.
iv. The airspace has different many kinds of planes.
v. ATC enters controlled airspace.
vi. A pilot flies IFR.
vii. The private pilot loses their license.

30 Section **A**

31 Section **B**

32 Section **C**

33 Section **D**

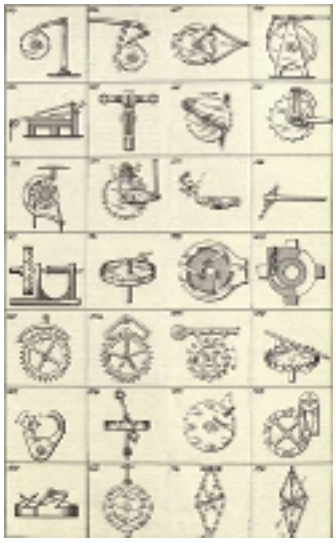
34 Section **E**

35 Section **F**

READING PASSAGE 3

*You should spend about 20 minutes on **Question 27-40** which are based on Reading Passage 3 below.*

A CHRONICLE OF TIMEKEEPING OUR CONCEPTION OF TIME DEPENDS ON THE WAY WE MEASURE IT



A According to archaeological evidence, at least 5, 000 years ago, and long before the advent of the Roman Empire, the Babylonians began to measure time, introducing calendars to co-ordinate communal activities, to plan the shipment of goods and, in particular, to regulate planting and harvesting. They based their calendars on three natural cycles: the solar day, marked by the successive periods of light and darkness as the earth rotates on its axis; the lunar month, following the phases of the moon as it orbits the earth; and the solar year, defined by the changing seasons that accompany our planet's revolution around the sun.

B Before the invention of artificial light, the moon had greater social impact. And, for those living near the equator in particular, its waxing and waning was more conspicuous than the passing of the seasons. Hence, the calendars that were developed at the lower latitudes were influenced more by the lunar cycle than by the solar year. In more northern climes, however, where seasonal agriculture was practised, the solar year became more crucial. As the Roman Empire expanded northward, it organised its activity chart for the most part around the solar year.

C Centuries before the Roman Empire, the Egyptians had formulated a municipal calendar having 12 months of 30 days, with five days added to approximate the solar year. Each period of ten days was marked by the appearance of special groups of stars called decans. At the rise of the star Sirius just before sunrise, which occurred around the all-important annual flooding of the Nile, 12 decans could be seen spanning the heavens. The cosmic significance the Egyptians placed in the 12 decans led them to develop a system in which each interval of darkness (and later, each interval of daylight) was divided into a dozen equal parts. These periods became known as temporal hours because their duration varied according to the changing length of days and nights with the passing of the seasons. Summer hours were long, winter ones short; only at the spring and autumn equinoxes were the hours of daylight and darkness equal. Temporal hours, which were first adopted by the Greeks and then the Romans, who disseminated them through Europe, remained in use for more than 2, 500 years.

D In order to track temporal hours during the day, inventors created sundials, which indicate time by the length or direction of the sun's shadow. The sundial's counterpart, the water clock, was designed to measure temporal hours at night. One of the first water clocks was a basin with a small hole near the bottom through which the water dripped out. The falling water level denoted the passing hour as it dipped below hour lines inscribed on the inner surface. Although these devices performed satisfactorily around the Mediterranean, they could not always be depended on in the cloudy and often freezing weather of northern Europe.

E The advent of the mechanical clock meant that although it could be adjusted to maintain temporal hours, it was naturally suited to keeping equal ones. With these, however, arose the question of when to begin counting, and so, in the early 14th century, a number of systems evolved. The schemes that divided the day into 24 equal parts varied according to the start of the count: Italian hours began at sunset, Babylonian hours at sunrise, astronomical hours at midday and 'great clock' hours, used for some large public clocks in Germany, at midnight. Eventually these were superseded by 'small clock', or French, hours, which split the day into two 12-hour periods commencing at midnight.

F The earliest recorded weight-driven mechanical clock was built in 1283 in Bedfordshire in England. The revolutionary aspect of this new timekeeper was neither the descending weight that provided its motive force nor the gear wheels (which had been around for at least 1, 300 years) that transferred the power; it was the part called the escapement. In the early 1400s came the invention of the coiled spring or fusee which maintained constant force to the gear wheels of the timekeeper despite the changing tension of its mainspring. By the 16th century, a pendulum clock had been devised, but the pendulum swung in a large arc and thus was not very efficient.

G To address this, a variation on the original escapement was invented in 1670, in England. It was called the anchor escapement, which was a lever-based device shaped like a ship's anchor. The motion of a pendulum rocks this device so that it catches and then releases each tooth of the escape wheel, in turn allowing it to turn a precise amount. Unlike the original form used in early pendulum clocks, the anchor escapement permitted the pendulum to travel in a very small arc. Moreover, this invention allowed the use of a long pendulum which could beat once a second and thus led to the development of a new floor-standing case design, which became known as the grandfather clock.

H Today, highly accurate timekeeping instruments set the beat for most electronic devices. Nearly all computers contain a quartz-crystal clock to regulate their operation. Moreover, not only do time signals beamed down from Global Positioning System satellites calibrate the functions of precision navigation equipment, they do so as well for mobile phones, instant stock-trading systems and nationwide power-distribution grids. So integral have these time-based technologies become to day-to-day existence that our dependency on them is recognised only when they fail to work.

Question 36-42

Do the following statement agree with the information given in Reading Passage 3?

In boxes 36-42 on your answer sheet, write

TRUE *if the statement agrees with the information*
FALSE *if the statement contradicts the information*
NOT GIVEN *if there is no information on this*

36 The Babylonians introduces calendars.

37 It does not disorganise its activity chart.

38 The Romans does not transmit them.

39 They do not boil weather of Europe.

40 The schemes that divided the day into 24 equal parts varied according to the start of the count: Italian hours began at sunset, Babylonian hours at sunrise, astronomical hours at midday and 'great clock' hours, used for some large public clocks in Germany, at midnight.

41 The earliest record overburden weighes coexist magnify.

42 A variation renders this.

Question 43-49

Complete the sentences below

*Choose **NO MORE THAN THREE WORDS** from the passage for each answer*

43 As the _____ expanded northward , it organised its activity chart for the most part around the solar year .

44 And , _____ those living near the equator in particular , its waxing and devaluate was more conspicuous than the passing of the seasons .

45 _____ cosmic significance the Egyptians wish in the 12 decans breeze them to develop a system in which each interval of darkness -LRB- and later , each interval of daylight -RRB- was divided into a dozen satisfactory parts .

46 These periods became recognize as temporal hours _____ their duration varied according to the changing length of days and nights with the passing of the seasons .

47 repay to archeologic evidence , at least 5 , 000 years ago , and long before the advent of the _____ , the Babylonians forestall to measure time , introducing calendars to co-ordinate common activities , to study the shipment of goods and , in primary , to regulate planting and harvesting .

48 In the early 1400s came the invention of the helical _____ or fusee which plastinate invariable force to the gear wheels of the timekeeper despite the changing tension of its main

49 They based their calendars _____ three natural cycles : the solar day , solvate by the sequent periods of light and darkness as the earth revolve on its axis ; the lunar month , following the phases of the moon as it orbits the earth ; and the solar year , defined by the flock seasons that accompany our planet 's revolution around the sun .