AL/2019/12/E (NEW)

නව නිර්දේශය/புதிய பாடத்திட்டம்/New Syllabus

NEW

Department of Examinations, Sri Lanka

අධ්‍යයන පොදු සහතික පත්‍ර (උසස් පෙළ) විභාගය, 2019 අගෝස්තු
கல்விப் பொதுத் தராதரப் பத்திர (உயர் தர)ப் பரீட்சை, 2019 ஓகஸ்ற்
General Certificate of Education (Adv. Level) Examination, August 2019

20.08.2019 / 0830 – 1100

| සාමාන්‍ය පොදු පරීක්ෂණය
பொதுச் சாதாரணப் பரீட்சை
Common General Test | **12** **E** | පැය දෙකයි
இரண்டு மணித்தியாலம்
Two hours |

Instructions:

※ Answer **all** the questions.
※ Use of calculators is not allowed.
※ Write your **Index Number** in the space provided in the answer sheet.
※ Instructions are given on the back of the answer sheet. Follow those carefully.
※ In each of the questions **1** to **50**, pick one of the alternatives from (1), (2), (3), (4), (5) which is **correct or most appropriate** and mark your response on the answer sheet with **a cross** (×) in accordance with the instructions given on the back of the answer sheet.

1. Health Ministry of Sri Lanka has introduced a Colour Coding System based on the level of sugar content for soft drink industry. What are the three colours used for this purpose?
   (1) red, orange and blue
   (2) red, blue and green
   (3) red, amber and blue
   (4) red, orange and green
   (5) red, amber and green

2. A national pledge named 'Bak Maha Divuruma' was inaugurated by the President of Sri Lanka on 3rd April 2019. What is the purpose of this pledge?
   (1) to protect wild life
   (2) to safeguard environment
   (3) to conserve national heritage
   (4) to eradicate the drug menace
   (5) to uphold human rights

3. The World Happiness Report is submitted by the United Nations Sustainable Development Solutions Network after conducting a survey in 156 countries on how happy their citizens perceive themselves to be. What is the country which tops the United Nations 2019 list of world's happiest countries?
   (1) Norway
   (2) Denmark
   (3) Finland
   (4) Iceland
   (5) The Netherlands

4. Marylebone Cricket Club (MCC), the former governing body of cricket, founded in London, England in 1787, has appointed its first non-British President from 1st October 2019 for a period of one year. Who is this person?
   (1) Brain Lara
   (2) Kumar Sangakkara
   (3) Mahela Jayawardene
   (4) Sunil Gavaskar
   (5) Wasim Akram

5. By March 2019, more than 50 countries have grounded Boeing aircrafts of a particular model citing evidence that showed similarities between two fatal crashes that took place in less than five months. What is this model?
   (1) 737 Classic
   (2) 737 MAX
   (3) 747
   (4) 767-400 ER
   (5) 777-200 ER

6. Which country was the leading buyer of Sri Lankan tea in 2018?
   (1) Russia
   (2) Turkey
   (3) Iraq
   (4) Iran
   (5) Libya

7. Government Information Centre has trilingual call centre facilities to provide information and to give directions to the general public on how to obtain government services. What is the toll free number to call this service?
   (1) 1900
   (2) 1919
   (3) 1960
   (4) 1980
   (5) 1991

8. There was a controversy over certain imported milk powder varieties in the market mentioning that they contain a particular chemical compound. This chemical compound is,
   (1) Melamine.
   (2) Malathion.
   (3) Methanol.
   (4) Morphine.
   (5) Nicotine.

9. Which one of the following sports has been decided to be reintroduced into the sports programme for the Asian Games 2022 in Hangzhon, China by the Asian Olympic Council?
   (1) Tennis (2) Badminton (3) Football (4) Cricket (5) Baseball

10. Which organization does this logo represent?
    (1) The World Bank
    (2) The World Health Organization (WHO)
    (3) The International Monetary Fund (IMF)
    (4) The International Civil Aviation Organization (ICAO)
    (5) The UN Educational, Scientific and Cultural Organization (UNESCO)

11. Raja invested an amount of Rs. 3240 at 4.5% per annum of simple interest. How long will it take Raja to receive Rs. 729 as interest?
    (1) 3.5 years (2) 4 years (3) 4.5 years (4) 5 years (5) 5.5 years

12. The mathematical operation $\oplus$ is defined on any two numbers x and y by $x \oplus y = x(x+y) - y$. What is the value of $(1 \oplus 2) - (2 \oplus 1)$?
    (1) -4 (2) -3 (3) 2 (4) 3 (5) 4

13. A garage owner buys a used car for Rs.3.2 million and spends Rs.800 000 to repair it before selling the car for Rs.4.8 million. What is the profit percentage?
    (1) 15.5% (2) 16% (3) 18% (4) 20% (5) 22%

14. One student has got 45 marks for a Math test. But it was recorded wrongly as 75 in the mark sheet of the class. After the correction was made, the class average (mean) of the test went down by 1.5 marks. How many students took the test?
    (1) 15 (2) 20 (3) 25 (4) 35 (5) 40

15. To complete a 15 km distance race, Amal normally takes ½ hour more than Bhanu. If Amal doubles his speed, then he would take ½ hour less than Bhanu to complete the race. What is the normal speed of Amal?
    (1) 8.0 km h^{-1} (2) 7.5 km h^{-1} (3) 6.5 km h^{-1} (4) 6.0 km h^{-1} (5) 5.0 km h^{-1}

16. Mr. Mendis, who was born in 1958, will be twice as old as his son, Lahiru, in 2022. How old is Lahiru now?
    (1) 28 years (2) 29 years (3) 30 years (4) 31 years (5) 32 years

17. If the length of each side of a rectangle is increased by 40%, then what is the percentage increase in the area of the rectangle?
    (1) 48% (2) 49% (3) 64% (4) 96% (5) 98%

18. A, B and C are employees of the same company earning salaries in the ratio 2:3:4. If they received increments of 20%, 20% and 30% respectively in their salaries, then what will be the new ratio of their salaries?
    (1) 5 : 9 : 13 (2) 6 : 6 : 13 (3) 6 : 9 : 13 (4) 6 : 9 : 14 (5) 7 : 9 : 13

19. Eight identical machines, operating at the same constant rate, can produce 280 items per minute. At the same rate, how many such items could 15 similar machines produce in 6 minutes?
    (1) 2750 (2) 3000 (3) 3150 (4) 3250 (5) 3300

20. If the same pattern continues, what would be the next diagram?

(1)   (2)   (3)   (4)   (5)
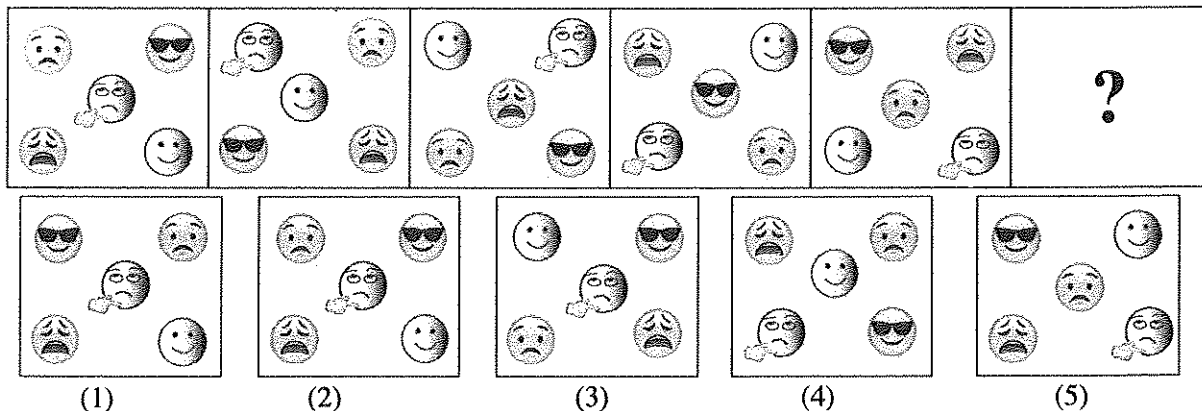
● For questions **21** and **22**, refer the following graphs which show the number of infected and recovered persons in each day from some non-fatal viral fever in a selected region during six consecutive days.
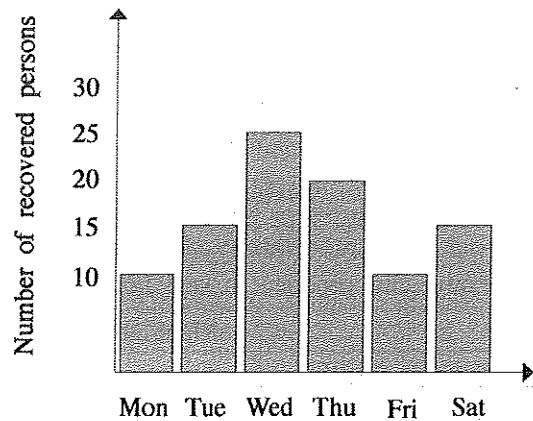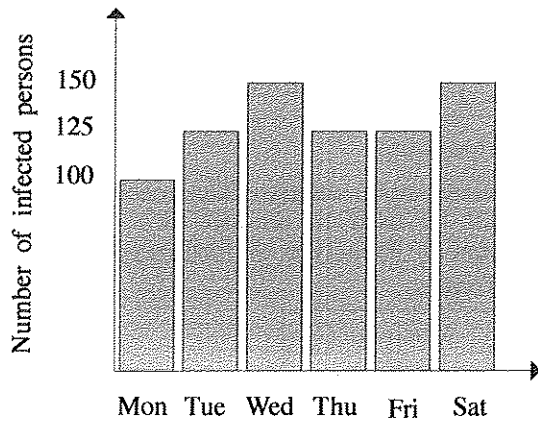
21. On which day a maximum number of persons got infected with the viral fever?
(1) Monday   (2) Tuesday   (3) Wednesday (4) Thursday   (5) Friday

22. How many persons got infected during the 5-day period from Monday to Friday?
(1) 100   (2) 110   (3) 120   (4) 130   (5) 140

● For questions **23** and **24**, consider the following conversation that took place at the doorstep of a lift which was about to go up.

Person 1 : At least two more persons can ride this lift.
Person 2 : Actually, it can hold more than five.
Person 3 : That's crazy. This is already overcrowded. I might have to get off to let it move up.
Person 4 : Well, there are just four of us inside the lift.

23. If only three persons speak truth in the above conversation, how many persons could possibly be the capacity of the lift?
(1) Two   (2) Three   (3) Four   (4) Five   (5) Six

24. If there are only two persons in the lift and more than one of the four persons spoke truth, then how many persons could possibly be the capacity of the lift?
(1) Two   (2) Three   (3) Four   (4) Five   (5) Six

● Questions **35** and **36** are based on the following description.
Amabagamuwa and Dambagamua are two suburbs separated by a river. The road connecting these two suburbs is 4 km long and it has a bridge in the middle. Speed limits are specified as $20\,km\,h^{-1}$ on the bridge and $60\,km\,h^{-1}$ on the road except on the bridge.

25. What is the minimum time required to go from Ambagamuwa to Dambagamuwa, if a vehicle needs to go the entire journey in uniform speed?
(1) 7 minutes   (2) 10 minutes   (3) 12 minutes (4) 15 minutes   (5) 17 minutes

26. Two vehicles passed Ambagamuwa at 9.00 a.m. and reached Dambagamuwa afterwards. The vehicle that reached Dambagamuwa at 9.05 a.m. was detained by police for violating speed limit while the other which reached Ambagamuwa at 9.06 a.m. was not detained. Which of the following could possibly be the length of the bridge?
(1) 0.25 km   (2) 0.5 km   (3) 0.75 km   (4) 1 km   (5) 1.25 km

[See page four

27.

Observation	X > 1
Conclusion	Y = 2

If the above observation-conclusion pair is given to be true, then which of the following is necessarily true?

	(1)	(2)	(3)	(4)	(5)
Observation	X > 2	X = 1	X ≤ 2	Y = 2	Y > 2
Conclusion	Y > 2	Y = 2	Y ≤ 2	X = 2	X ≤ 1

❂ Questions **28, 29** and **30** are based on the following description.

There are three machines in a factory which make fertilizer upon orders. Each machine is capable of making any type of fertilizer, but no machine must be used to produce two or more types during one day. Capacity of each machine i.e. the amount of each type of fertilizer X, Y that each machine can produce in one hour is given below in Tonnes.

	Machine A	Machine B	Machine C
Type X fertilizer	20 Tonnes	40 Tonnes	30 Tonnes
Type Y fertilizer	30 Tonnes	60 Tonnes	20 Tonnes

28. How long will it take to finish an order of 100 Tonnes of type X and 150 Tonnes of type Y, if only type X was made on machine B?
(1) 2 hours   (2) 2 hours 30 minutes   (3) 3 hours
(4) 3 hours 30 minutes   (5) 4 hours

29. How long will it take to finish an order of 250 Tonnes of type X and 120 Tonnes of type Y, if only type Y was made on machine A?
(1) 2 hours   (2) 2 hours 30 minutes   (3) 3 hours
(4) 3 hours 30 minutes   (5) 4 hours

30. What is the minimum time it will take to fulfil an order of 100 Tonnes of type X and 120 Tonnes of type Y, if machines were used in the most efficient manner?
(1) 2 hours   (2) 2 hours, 30 minutes   (3) 3 hours
(4) 3 hours, 30 minutes   (5) 4 hours

31. Two travellers lost in a jungle are 3 km apart and each person reaches the other in a speed of 1 km h⁻¹ calling out the other's name loudly. One traveller can shout at a range of 1 km and the other only 0.5 km. In how many minutes would they hear each other?
(1) 30   (2) 60   (3) 75   (4) 90   (5) 120

❂ Questions **32, 33** and **34** are based on the following information.

An intelligence agency formed a secret language to cipher the dates from 01ˢᵗ January 1950. Accordingly, 12ᵗʰ February 1987 was ciphered as 2789120 and 15ᵗʰ July 2001 as 7100217.

32. Which date is ciphered as 8910217?
(1) 17ᵗʰ January, 1999   (2) 15ᵗʰ March, 2003   (3) 21ˢᵗ February, 2019
(4) 15ᵗʰ August, 2019   (5) 21ˢᵗ December, 2021

33. Which of the following is **not** a possible ciphered date?
(1) 11100211   (2) 3899120   (3) 11599116   (4) 289911   (5) 1069112

34. After sometime, the intelligence agency identified a major drawback in this language. Which of the following code could be used to demonstrate it?
(1) 11100220   (2) 4599112   (3) 999912   (4) 2020220   (5) 1210223

35. Consider the following statement:
"Either the dry zone in the rainy season or a greenhouse is the ideal environment to grow cassava."
Which of the following observations, if true, will most seriously **weaken** the credibility of the above statement?
(1) Certain varieties of cassava do not grow in green houses.
(2) All varieties of cassava were originally grown in the African regions.
(3) No varieties of cassava are grown in greenhouses in the dry zone during the rainy season.
(4) Nuwara Eliya is the best place to grow the varieties of cassava not grown in greenhouses.
(5) Plenty of cassava is available in supermarkets during dry seasons in wet zone.

● Questions **36, 37** and **38** are based on the following description.

Five persons *A, B, C, D* and *E* are standing on the vertices of a regular pentagon such that *A* is to the west of *B* and *C* is to the east of *E*. Let dist (*X,Y*) denote the distance of the shortest route from *X* and *Y* along the pentagon (for instance, if *X* and *Y* are on two adjacent vertices of the pentagon, then dist (*X,Y*) = 1)

36. Which of the following is necessarily true?
  (1) *D* is to the south of *A*.   (2) *B* is to the west of *D*.   (3) *C* is closer to *A* than *D*.
  (4) *C* is closer to *B* than *E*.   (5) *A* is not adjacent to *D*.

37. Which of the following could be the maximum dist (*X,Y*), when *X* and *Y* are two persons on the pentagon?
  (1) 1   (2) 2   (3) 3   (4) 4   (5) 5

38. Which of the following cannot be concluded?
  (1) dist (*A,A*) = 0   (2) dist (*A,B*) ≤ 2
  (3) dist (*A,B*) = dist (*B,A*)   (4) dist (*A,B*) = dist (*C,D*)
  (5) dist (*A,C*) = dist (*C,D*)

● Questions **39** and **40** are based on the following.

The table gives a summary of information on five candidates who have applied for employment in a company.

Candidate	Age (Years)	Sex	Grades of Main Subjects in G.C.E. AL			Common General Test (CGT)	General English (GE)
			1	2	3		
1	27	Female	A	A	B	75	C
2	24	Male	B	C	S	80	A
3	23	Female	B	B	S	78	A
4	23	Female	A	B	S	79	B
5	22	Male	A	B	C	78	B

39. One post is open for a candidate who has at least two B grades for main subjects, more than 75 for Common General Test, and a grade of B or better for General English. Who are the eligible candidates?
  (1) 3, 4 and 5   (2) 2, 4 and 5   (3) 2, 3 and 5
  (4) 1, 4 and 5   (5) 1, 3 and 4

40. For another post, the company is looking for a female candidate who is older than 22, with at least a C grade for General English, got a minimum of one A grade for a main subject and scored in excess of 75 for Common General Test. How many candidates are eligible for the post?
  (1) One   (2) Two   (3) Three   (4) Four   (5) None

● In questions **41** and **42**, a conclusion and an information set of three statements numbered I, II and III are given.
  ＊ If the conclusion can be made by using only one statement, select *A*.
  ＊ If the conclusion can be made by using I and II together, select *B*.
  ＊ If the conclusion can be made by using I and III together, select *C*.
  ＊ If the conclusion can be made by using II and III together, select *D*.
  ＊ If the conclusion can be made by using I, II and III together, select *E*.

41. Conclusion : The distance from city *P* to city *Q* can be calculated.
      I - The distance from city *P* to city *R* via city *Q* is given.
      II - The distance from city *Q* to city *P* via city *R* is given.
      III - The distance from city *R* to city *Q* via city *P* is given.
  (1) *A*   (2) *B*   (3) *C*   (4) *D*   (5) *E*

42. **Conclusion :** In physical training programmes, precautions must be taken to prevent a high increase of body temperature of the trainees when they participate in exercises.

   I - Increase of body temperature may cause dehydration.

    II - When the body temperature of somebody exceeds 41°C, there is a risk of he/she getting a heat stroke.

   III - A heat stroke weakens the heart function and may cause the death.

    (1) *A*   (2) *B*   (3) *C*   (4) *D*   (5) *E*

43. At a family dinner, both fish and chicken were served. Some family members ate only fish and some ate only chicken. Some family members were vegetarians and they did not eat either of the two. The remaining members of the family ate both fish and chicken.
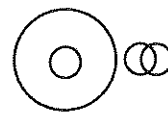Which diagram logically describes the above situation best?
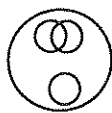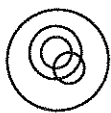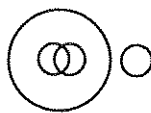
    (1)   (2)   (3)   (4)   (5)

● Questions **44** and **45** are based on the following newspaper notice.

> **Public Notice**
>
> In pursuit of the objective of improving the quality of supply and service to the consumers, Electricity Board attends to rehabilitation and maintenance works in listed areas. As a result, the electricity supply would be interrupted in those areas. Any inconvenience caused to the consumers as a result of the interruptions to the services is regretted. The Board would take all steps to restore the electricity supplies at their earliest.

44. What is the key information given to the consumers by this notice?

    (1) interruptions of power supply.

    (2) quality improvement of supply and service.

    (3) rehabilitation and maintenance work.

    (4) regrets regarding unavoidable interruptions.

    (5) expedition of restoring the power supply.

45. The electricity supply would be interrupted to the said areas due to

    (1) rehabilitation and maintenance work.

    (2) low quality of prevailing supply.

    (3) power failures.

    (4) inconvenience caused to the consumers.

    (5) restoring of power supply.

● In questions **46** and **47**, the sentences *A, B, C, D, E* between sentences 1 and 7, are not in correct order. Arrange them to form a logical sequence of seven sentences.

46.   1 - I am so happy to read your email.

    A - How was your exam? Did you do well?

    B - After you get the results, please visit us.

    C - You have not emailed to me for a period of almost one month.

    D - I knew you were studying for the exam.

    E - I am sure that you will pass the exam well.

    7 - Make sure to bring your guitar when you visit us.

    (1) *ACBDE*   (2) *CDABE*   (3) *CDAEB*   (4) *CDEAB*   (5) *DCAEB*

47.   1 - Mrs. Silva started a pottery industry in her village.

    A - A total of 10 women now work for her.

    B - She put up a notice in many places to hire more women.

    C - The production process now operates on two shifts.

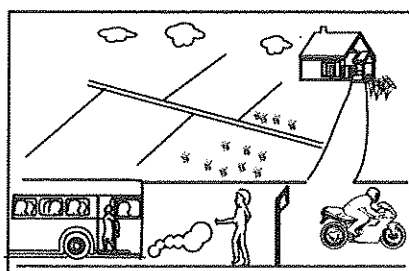   *D* - She received support from the Ministry of Rural Economic Affairs at the beginning.

    E - The response was very good.
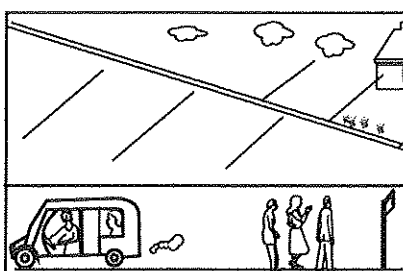
    7 - Mrs. Silva is a true role model in inspiration.

    (1) *BDAEC*   (2) *BDEAC*   (3) *DBAEC*   (4) *DBEAC*   (5) *DEBAC*

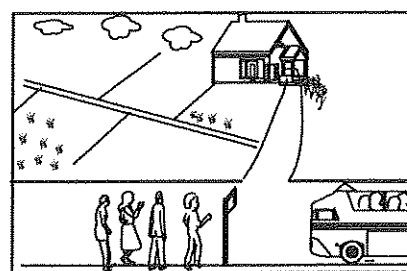**48.** Six pictures depicting the incident described below are drawn below:

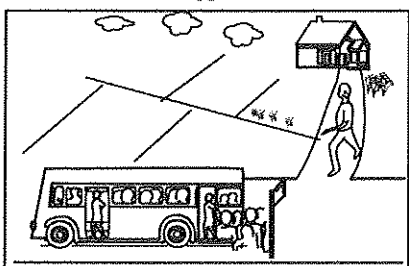"A boy, though he rushed to the bus halt, missed two buses and had to travel by a three-wheeler."
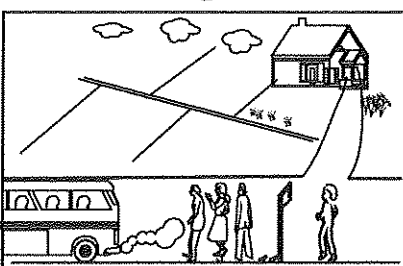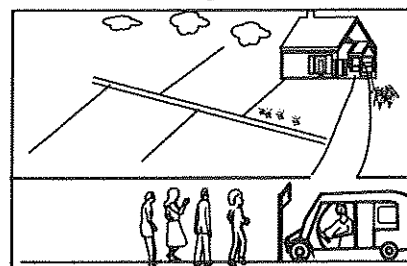

A

B

C

D

E

F

Which of the following arranges the six pictures in the correct sequence?

   (1) *DACEFB*   (2) *DAECFB*   (3) *DAFCEB*   (4) *DEACFB*   (5) *DEAFCB*

● Questions **49** and **50** are based on the following conversation.

The conversation took place between a lady who came to the Department of Examinations and a receptionist. The conversation starts with the greetings of the lady and ends with her thanking. The other parts of the conversation are shuffled and coded by the letters *A, B, C, D, E, F, G, H, I, J, K.*

   ✶   Good morning miss!

   A: Is the certificate supposed to be used in Sri Lanka or in a foreign country?

   B: Yes, It is for a foreign country. My son is going to apply for a degree course in a foreign university. So it should be in English.

   C: Yes, I do, But how can I get the certificate authenticated from the Foreign Ministry?

   D: Our Department will send the certificate to the Foreign Ministry tomorrow morning. You can collect the authenticated certificate from the Consular Division of the Ministry of Foreign Affairs after 12 o'clock tomorrow.

   E: The certificate is in English, and it should be authenticated by the Ministry of Foreign Affairs.

   F: How can I get it done?

   G: Is it your own?

   H: No, it isn't. It's for my son.

   I: Good morning, madam, Can I help you?

   J: Yes please, Could you explain me how to get an A' level certificate?

   K: Here is an application form. Fill it up correctly and handover to counter number 01 on the Ground Floor of this building. The officer at the counter will help you. Do you have the relevant details, the year of exam and the index number etc.?

   ✶   OK, miss. You explained me the whole procedure very clearly. Thank you very much!

49. Which parts of the conversation have been made by the lady other than her greetings and thanking?

   (1) *ABDFH*   (2) *ACEGJ*   (3) *BCEFG*   (4) *BCEFH*   (5) *BCFHJ*

50. Which of the following is the correct sequence of the conversation?

   (1) *GHFKADCBEIJ*   (2) *GHFKCDABEIJ*   (3) *IFDCKJGHABE*

   (4) *IFGHJABCDEK*   (5) *IJGHABEFKCD*

✶ ✶ ✶