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Section 1 - Paper I General Knowledge and Current Affairs

No. of Questions: 15

1) Saikhom Mirabai Chanu won the Olympic Silver medal at the Tokyo Olympics in July 2021 for which of the following sports?

- A) Weightlifting
- B) Archery
- C) Wrestling
- D) Boxing

1) ନିମ୍ନଲିଖିତ କେଉଁ କ୍ରୀଡା ପାଇଁ ଜୁଲାଇ 2021 ରେ ଟୋକିଓ ଅଲିମ୍ପିକ୍ସରେ ସାଇଖୋମ୍ ମିରାବାଲ ଚାନୁ ଅଲିମ୍ପିକ୍ ରୌପ୍ୟ ପଦକ ଜିତିଥିଲେ?

- A) ଭାର ଉତ୍ତୋଳନ
- B) ଚିରନ୍ଦାଜୀ
- C) କୁସ୍ତି
- D) ବକ୍ସିଂ

2) In 2021 Basavaraj Bommai was sworn in as the new Chief Minister of which of the following states?

- A) Maharashtra
- B) Tamil Nadu
- C) Kerala
- D) Karnataka

2) 2021 ମସିହାରେ ବସବରାଜ୍ ବୋମ୍ମାଇ, ନିମ୍ନଲିଖିତ ରାଜ୍ୟଗୁଡ଼ିକ ମଧ୍ୟରୁ କେଉଁ ରାଜ୍ୟରେ ନୂତନ ମୁଖ୍ୟମନ୍ତ୍ରୀ ଭାବରେ ଶପଥ ଗ୍ରହଣ କରିଥିଲେ?

- A) ମହାରାଷ୍ଟ୍ର
- B) ତାମିଲନାଡୁ
- C) କେରଳ
- D) କର୍ଣ୍ଣାଟକ

3) In 2022, who among the following has been appointed as the Chairman of the University Grants Commission (UGC)?

- A) Sanjay Malhotra
- B) Munishwar Nath Bhandari
- C) M Jagadesh Kumar
- D) Avinash Chandra Pandey

3) 2022 ରେ, ନିମ୍ନଲିଖିତ ମଧ୍ୟରୁ କିଏ ବିଶ୍ୱବିଦ୍ୟାଳୟ ଅନୁଦାନ ଆୟୋଗ (ୟୁଜିସି) ର ଚେୟାରମ୍ୟାନ୍ ଭାବରେ ନିଯୁକ୍ତ ହୋଇଛନ୍ତି?

- A) ସଞ୍ଜୟ ମାଲହୋତ୍ରା
- B) ମୁନିଶ୍ୱର ନାଥ ଭଟ୍ଟାଚାରୀ
- C) ଏମ ଜଗଦେଶ କୁମାର
- D) ଅବିନାଶ ଚନ୍ଦ୍ର ପାଣ୍ଡେ

4) In December 2021, which of the following banks has been appointed as an Agency Bank of the Reserve Bank of India to conduct government business?

- A) State Bank of India
- B) Canara Bank
- C) Bank of India
- D) Bandhan Bank

4) ଡିସେମ୍ବର 2021 ରେ, ନିମ୍ନଲିଖିତ ମଧ୍ୟରୁ କେଉଁ ବ୍ୟାଙ୍କକୁ ସରକାରୀ ବ୍ୟବସାୟ ପରିଚାଳନା ପାଇଁ ଭାରତୀୟ ରିଜର୍ଭ ବ୍ୟାଙ୍କର ଏକ ଏଜେନ୍ସି ବ୍ୟାଙ୍କ ଭାବରେ ନିଯୁକ୍ତ କରାଯାଇଛି?

- A) ଷ୍ଟେଟ ବ୍ୟାଙ୍କ ଅଫ୍ ଇଣ୍ଡିଆ
- B) କାନାରା ବ୍ୟାଙ୍କ
- C) ବ୍ୟାଙ୍କ ଅଫ୍ ଇଣ୍ଡିଆ
- D) ବନ୍ଧନ ବ୍ୟାଙ୍କ

5) What was the rank of India in the Human Development Index 2020, report published by the United Nations Development Programme?

- A) 124
- B) 131
- C) 66
- D) 138

5) ମିଳିତ ଜାତିସଂଘର ବିକାଶ କାର୍ଯ୍ୟକ୍ରମ ଦ୍ୱାରା ପ୍ରକାଶିତ ମାନବ ବିକାଶ ସୂଚକାଙ୍କ 2020 ରେ ଭାରତର ମାନ୍ୟତା କଣ ଥିଲା?

- A) 124
- B) 131
- C) 66
- D) 138

6) Annual Parasite Incidence rate is calculated for which of the following disease?

- A) Tuberculosis
- B) Covid19
- C) Diabetes
- D) Malaria

6) ନିମ୍ନଲିଖିତ ମଧ୍ୟରୁ କେଉଁ ରୋଗ ପାଇଁ ବାର୍ଷିକ ପରଜୀବୀ ଘଟଣା ହାର ଗଣନା କରାଯାଏ?

- A) ଯକ୍ଷ୍ମା
- B) କୋଭିଡ୍-19
- C) ମଧୁମେହ
- D) ମ୍ୟାଲେରିଆ

7) The phenomenon of piezoelectric effect is observable in which of the following options?

- A) Photo cells in solar panels
- B) Battery operated car
- C) Dynamo of bicycle
- D) Quartz crystals in the watch

7) ନିମ୍ନଲିଖିତ ବିକଳ୍ପଗୁଡ଼ିକ ମଧ୍ୟରୁ କେଉଁଠିରେ ଚାପ ବିଦ୍ୟୁତ୍ ପ୍ରଭାବ ଦେଖାଯାଏ?

- A) ସୋଲାର ପ୍ୟାନେଲରେ ଫୋଟୋ ସେଲ୍
- B) ବ୍ୟାଟେରୀ ଚାଳିତ କାର
- C) ସାଇକେଲର ଡାଇନାମୋ
- D) ଘଣ୍ଟାରେ କ୍ୱାର୍ଟଜ୍ କ୍ୱାଟିକ୍

8) The water stored in a dam possesses which of the following forms of energy?

- A) Kinetic energy
- B) Heat energy
- C) Potential energy
- D) Electric energy

8) ଏକ ନବୀବନ୍ଧରେ ଗଢ଼ିତ ଜଳ ନିମ୍ନଲିଖିତ ମଧ୍ୟରୁ କେଉଁ ପ୍ରକାରର ଶକ୍ତି ଧାରଣ କରେ?

- A) ଗତିଜ ଶକ୍ତି
- B) ଉତ୍ତାପ ଶକ୍ତି
- C) ସ୍ଥିତିଜ ଶକ୍ତି
- D) ବିଦ୍ୟୁତ ଶକ୍ତି

9) During whose tenure as Governor-General of Bengal, there came an end to the dual system of administration of East India Company?

- A) Lord Canning
- B) John Shore
- C) Warren Hastings
- D) George Barlow

9) ବଙ୍ଗାଳର ଗଭର୍ଣ୍ଣର-ଜେନେରାଲ ଭାବରେ କାହାର କାର୍ଯ୍ୟକାଳ ମଧ୍ୟରେ, ଇଷ୍ଟ ଇଣ୍ଡିଆ କମ୍ପାନୀର ଦ୍ୱୈତ ଶାସନ ବ୍ୟବସ୍ଥାର ସମାପ୍ତ ହେଲା?

- A) ଲର୍ଡ କ୍ୟାନିଂ
- B) ଜନ୍ ଶୋର୍
- C) ୱାରେନ୍ ହେଷ୍ଟିଂସ୍
- D) ଜର୍ଜ ବାର୍ଲୋ

10) The Revolt of 1857 for the Indian Independence against the British first started at which place in India?

- A) Delhi
- B) Meerut
- C) Nagpur
- D) Cuttack

10) ଭାରତର ସ୍ୱାଧୀନତା ପାଇଁ ବ୍ରିଟିଶମାନଙ୍କ ବିରୁଦ୍ଧରେ ,1857 ର ବିଦ୍ରୋହ ପ୍ରଥମେ ଭାରତର କେଉଁ ସ୍ଥାନରେ ଆରମ୍ଭ ହୋଇଥିଲା?

- A) ଦିଲ୍ଲୀ
- B) ମିରଟ
- C) ନାଗପୁର
- D) କଟକ

11) Which of the following freedom fighters of India is popularly known as Chakhi Khuntia?

- A) Veer Surendra Sai
- B) Buxi Jagabandhu
- C) Chandan Hajuri
- D) Magal Pandey

11) ଭାରତର ନିମ୍ନଲିଖିତ ସ୍ୱାଧୀନତା ସଂଗ୍ରାମୀମାନଙ୍କ ମଧ୍ୟରୁ କିଏ ଚାଖୀ ଖୁଣ୍ଟିଆ ନାମରେ ଜଣାଶୁଣା?

- A) ବୀର ସୁରେନ୍ଦ୍ର ସାଏ
- B) ବୁକ୍ସି ଜଗବନ୍ଧୁ
- C) ଚନ୍ଦନ ହଜୁରୀ
- D) ମାଗଲ ପାଣ୍ଡେ

12) Mississippi River flows through which of the following country?

- A) Russia
- B) China
- C) USA
- D) United Kingdom

12) ନିମ୍ନ ଦେଶ ମଧ୍ୟରୁ କେଉଁଟି ଦେଇ ମିସିସିପି ନଦୀ ପ୍ରବାହିତ ହୁଏ?

- A) ରୁଷ
- B) ଚୀନ
- C) ଯୁକ୍ତରାଷ୍ଟ୍ର ଆମେରିକା
- D) ଇଂଲଣ୍ଡ

13) Angel waterfall is located in which of the following nation?

- A) South Africa
- B) Canada
- C) Costa Rica
- D) Venezuela

13) ନିମ୍ନ ଦେଶ ମଧ୍ୟରୁ କେଉଁଠାରେ ଏଞ୍ଜିଲ୍ ଜଳପ୍ରପାତ ଅବସ୍ଥିତ?

- A) ଦକ୍ଷିଣ ଆଫ୍ରିକା
- B) କାନାଡା
- C) କୋଷ୍ଟାରିକା
- D) ଭେନେଜୁଏଲା

14) In the Indian constitutional set up, to whom are the Council of Ministers collectively responsible?

- A) The Prime Minister
- B) The Governor
- C) The Lok Sabha
- D) The Rajya Sabha

14) ଭାରତୀୟ ସାମ୍ବିଧାନିକ ବ୍ୟବସ୍ଥାରେ ମନ୍ତ୍ରୀ ପରିଷଦ କାହା ପାଇଁ ଉତ୍ତରଦାୟୀ?

- A) ପ୍ରଧାନମନ୍ତ୍ରୀ
- B) ରାଜ୍ୟପାଳ
- C) ଲୋକସଭା
- D) ରାଜ୍ୟସଭା

15) As per the Article 75 of the Indian Constitution, who appoints the Prime Minister?

- A) The President
- B) The Chairman of Rajya Sabha
- C) The Speaker of Lok Sabha
- D) The Chief Justice of India

15) ଭାରତୀୟ ସମ୍ବିଧାନର ଧାରା 75 ଅନୁଯାୟୀ, ପ୍ରଧାନମନ୍ତ୍ରୀଙ୍କୁ କିଏ ନିଯୁକ୍ତ କରନ୍ତି?

- A) ରାଷ୍ଟ୍ରପତି
- B) ରାଜ୍ୟସଭାର ଅଧ୍ୟକ୍ଷ
- C) ଲୋକସଭାର ବାଚସ୍ପତି
- D) ଭାରତର ମୁଖ୍ୟ ବିଚାରପତି

Section 2 - Paper I Reasoning Ability

No. of Questions: 10

16) If P and Q together can complete a job in 3 days while P alone can complete the same in 6 days, then how many days would be required by Q to complete the job alone?

- A) 3 days
- B) 4 days
- C) 6 days
- D) 12 days

16) ଯଦି P ଏବଂ Q ମିଳିତ ଭାବରେ ଗୋଟିଏ କାମକୁ 3 ଦିନରେ ଶେଷ କରିପାରନ୍ତି, ଯେତେବେଳେ କି କେବଳ P ଏକାକୀ ସମାନ କାମକୁ 6 ଦିନରେ ଶେଷ କରିପାରନ୍ତି ତେବେ କେବଳ Q ଏକାକୀ ଏହି କାର୍ଯ୍ୟକୁ ଶେଷ କରିବା ପାଇଁ କେତେଦିନ ଆବଶ୍ୟକ କରିଥାନ୍ତି?

- A) 3 ଦିନ
- B) 4 ଦିନ
- C) 6 ଦିନ
- D) 12 ଦିନ

17) P alone can finish a job in 12 days while Q alone can finish it in 16 days. With the help of R, they have finished the job in 4 days for a contract price of ₹ 1,200. What should be the payment received by Q?

- A) ₹ 300
- B) ₹ 400
- C) ₹ 500
- D) ₹ 600

17) P ଗୋଟିଏ କାର୍ଯ୍ୟକୁ ଏକାକୀ 12 ଦିନରେ କରିପାରନ୍ତି, ଯେତେବେଳେ କି Q ଏକାକୀ ଏହାକୁ 16 ଦିନରେ କରିପାରନ୍ତି। R କ ସହାୟତାରେ ସେମାନେ ₹ 1,200ର ଠିକା ମୂଲ୍ୟରେ 4 ଦିନରେ କାମଟି ଶେଷ କରିଛନ୍ତି। Q କେତେ ଟଙ୍କା ଲାଭ କରିବା ଉଚିତ୍?

- A) ₹ 300
- B) ₹ 400
- C) ₹ 500
- D) ₹ 600

18) In a college, 9 examiners can check 900 answer books consisting of same number of pages in 12 days working 5 hours a day. If the number of answer books doubled and five examiners left, how many hours a day are they needed to work to complete the evaluation process in 30 days?

- A) 6 hours a day
- B) 7 hours a day
- C) 8 hours a day
- D) 9 hours a day

18) ଏକ ମହାବିଦ୍ୟାଳୟରେ 9 ଜଣ ପରୀକ୍ଷା ମୂଲ୍ୟାୟନକାରୀ ଦିନକୁ 5ଘଣ୍ଟା କାମ କରି 12 ଦିନରେ ସମାନ ସଂଖ୍ୟକ ପୃଷ୍ଠା ରହିଥିବା 900 ଟି ଉତ୍ତର ଖାତା ମୂଲ୍ୟାୟନ କରିଥାନ୍ତି। ଯଦି ଉତ୍ତର ଖାତାର ସଂଖ୍ୟା 2 ଗୁଣ କରି ଦିଆଯାଏ ଏବଂ 5 ଜଣ ପରୀକ୍ଷା ମୂଲ୍ୟାୟନକାରୀ କାମ ଛାଡ଼ି ଚାଲିଯାଆନ୍ତି, ତେବେ ସେମାନେ 30 ଦିନରେ ମୂଲ୍ୟାୟନ ପ୍ରକ୍ରିୟା ଶେଷ କରିବା ପାଇଁ ଦିନକୁ କେତେ ଘଣ୍ଟା କାର୍ଯ୍ୟ କରିବା ଆବଶ୍ୟକ ହେବ?

- A) ଦିନରେ 6 ଘଣ୍ଟା
- B) ଦିନରେ 7 ଘଣ୍ଟା
- C) ଦିନରେ 8 ଘଣ୍ଟା
- D) ଦିନରେ 9 ଘଣ୍ଟା

19) Janaki started from her house and walked 2 kms towards North. Then she took a right turn and covered one kilometer. Then she took again a right turn and walked for 2 kms. In what direction is she going?

- A) North
- B) East
- C) South
- D) West

19) ଜାନକୀ ତାଙ୍କ ଘରୁ ବାହାରି ଉତ୍ତର ଦିଗକୁ 2 କିଲୋମିଟର ଚାଲି ଚାଲି ଗଲେ। ତାହା ପରେ ସେ ଡାହାଣକୁ ବୁଲିଲେ ଓ ଏକ କିଲୋମିଟର ଯାତ୍ରା କଲେ। ତାହା ପରେ ସେ ପୁଣି ଡାହାଣକୁ ବୁଲିଲେ ଓ 2 କିଲୋମିଟର ଚାଲିଲେ। ସେ ଏବେ କେଉଁ ଦିଗରେ ଯାଉଛନ୍ତି?

- A) ଉତ୍ତର
- B) ପୂର୍ବ
- C) ଦକ୍ଷିଣ
- D) ପଶ୍ଚିମ

20) Study the following information carefully and answer the question that follows:

A Research Institute is recruiting a librarian to digitize its information resources, among other duties. Candidates must possess the following criteria. The candidate must

- I) be not less than 35 years and not exceed 40 years as on 01.11.2009.
- II) have Bachelor's Degree in Library and information Science with 65% marks.
- III) have PhD in Library Science.
- IV) have post qualification experience of at least 4 years in a University Library.

However, If the candidate fulfils the above mentioned criteria except

A) (II), but has a UGC NET certification with all other above criteria fulfilled, he/she may be referred to the Dean.

B) (IV), but all the eligibility criteria are met and candidate has at least one years experience in a research institute, he/she may be offered contractual appointment for a year.

Based on the above criteria, study carefully whether the following candidates are eligible for the recruitment process and mark your answer as follows. You are not to assume anything other than the information provided in each question. All cases are given to you as on 1/11/2009.

Mark Answer (1) If he/she is to be shortlisted.

Mark Answer (2) If he/she is not to be shortlisted.

Mark Answer (3) If he/she should be referred to the Dean.

Mark Answer (4) If he/she may be offered contractual appointment if required.

Prakash Sinha has been a librarian for a government institution for three years. Prior to this, he was a University Librarian for 7 years after completing his PhD in Library Science. He graduated in 1991 with 68% in Library Science. He is exactly 40 years of age on the specified date.

- A) 1
- B) 2
- C) 3
- D) 4

20) ନିମ୍ନରେ ଦିଆଯାଇଥିବା ସୂଚନା ଧ୍ୟାନପୂର୍ବକ ଅଧ୍ୟୟନ କରନ୍ତୁ ଏବଂ ତାହା ତଳେ ଦିଆଯାଇଥିବା ପ୍ରଶ୍ନର ଉତ୍ତର ଦିଅନ୍ତୁ :

ଏକ ଗବେଷଣା ପ୍ରତିଷ୍ଠାନ ଏହାର ସୂଚନା ଉତ୍ସଗୁଡ଼ିକୁ ଡିଜିଟାଇଜ୍ କରିବା ସହିତ ଅନ୍ୟାନ୍ୟ କାର୍ଯ୍ୟ ପାଇଁ ଜଣେ ଲାଇବ୍ରେରୀଆନ୍ ନିଯୁକ୍ତ କରୁଛନ୍ତି। ପ୍ରାର୍ଥୀମାନେ ନିମ୍ନଲିଖିତ ମାନଦଣ୍ଡ ପୂରଣ କରୁଥିବା ଆବଶ୍ୟକୀୟ ପ୍ରାର୍ଥୀ ହୋଇଥିବା ଆବଶ୍ୟକ

- I) 01.11.2009 ସୁଦ୍ଧା ବୟସ ଅତିକମରେ 35 ବର୍ଷ ରୁ କମ୍ ହୋଇନଥିବ ଏବଂ 40 ବର୍ଷରୁ ଅଧିକ ହୋଇନଥିବ।
- II) ଲାଇବ୍ରେରୀ ଏବଂ ଇନଫର୍ମେସନ୍ ସାଇନ୍ସରେ 65% ମାର୍କ ସହିତ ସ୍ନାତକ ଡିଗ୍ରୀ ଥିବ।
- III) ଲାଇବ୍ରେରୀ ସାଇନ୍ସରେ ପିଏଚଡି କରିଥିବେ।
- IV) ଯୋଗ୍ୟତା ହାସଲ ପରେ ଅତିକମରେ ଏକ ବିଶ୍ୱବିଦ୍ୟାଳୟ ଲାଇବ୍ରେରୀରେ 4 ବର୍ଷର ଅଭିଜ୍ଞତା ରହିଥିବ।

ଆବଶ୍ୟକୀୟ ଯଦି ପ୍ରାର୍ଥୀ ଉପର ବର୍ଣ୍ଣିତ ମାନଦଣ୍ଡଗୁଡ଼ିକ କରନ୍ତି,

A) ଉପରୋକ୍ତ (II) ବ୍ୟତୀତ, କିନ୍ତୁ ତାଙ୍କର ଅନ୍ୟ ସମସ୍ତ ଉପରୋକ୍ତ ମାନଦଣ୍ଡ ପୂରଣ ହେବା ସହିତ ଯୁଜିସି ନେଟ୍ ସାର୍ଟିଫିକେଟ୍ ରହିଛି, ତାଙ୍କୁ ଡିନଙ୍କ ନିକଟକୁ ପଠାଯାଇପାରିବ।

B) ଉପରୋକ୍ତ (IV) ବ୍ୟତୀତ, କିନ୍ତୁ ସମସ୍ତ ଯୋଗ୍ୟତା ମାନଦଣ୍ଡ ପୂରଣ ହୋଇଛି ଏବଂ ପ୍ରାର୍ଥୀଙ୍କର ଗବେଷଣା ପ୍ରତିଷ୍ଠାନରେ ଅତିକମରେ 1 ବର୍ଷର ଅଭିଜ୍ଞତା

ରହିଛି, ତାଙ୍କୁ ଏକ ବର୍ଷ ପାଇଁ ଠିକାରେ ନିଯୁକ୍ତି ଦିଆଯାଇପାରେ।

ଉପରୋକ୍ତ ମାନବଶକ୍ତ ଆଧାରରେ, ଯତ୍ନପୂର୍ବକ ବିଚାର କରନ୍ତୁ ଯେ ନିମ୍ନଲିଖିତ ପ୍ରାର୍ଥୀ ନିଯୁକ୍ତି ପ୍ରକ୍ରିୟା ପାଇଁ ଯୋଗ୍ୟ କି ନା ଏବଂ ନିମ୍ନରେ ଦିଆଯାଇଥିବା ଅନୁଯାୟୀ ଆପଣଙ୍କ ଉତ୍ତର ଚିହ୍ନିତ କରନ୍ତୁ। ଆପଣଙ୍କୁ ପ୍ରତିଟି ପ୍ରଶ୍ନରେ ଦିଆଯାଇଥିବା ସୂଚନା ବ୍ୟତୀତ ଅନ୍ୟ କୌଣସି ବିଷୟ ଧରି ନେବାକୁ କିମ୍ବା ଅନୁମାନ ଲଗାଇବାକୁ ହେବ ନାହିଁ। ଏ ସମସ୍ତ ଘଟଣା ଆପଣଙ୍କୁ 1/11/2009 ଅନୁଯାୟୀ ଦିଆଯାଇଛି।

ଯଦି ସେ ବଛାବଛି ତାଲିକାଭୁକ୍ତ ହେବେ ତେବେ ଉତ୍ତର (1) ଚିହ୍ନିତ କରନ୍ତୁ।

ଯଦି ସେ ବଛାବଛି ତାଲିକାଭୁକ୍ତ ହେବେ ନାହିଁ ତେବେ ଉତ୍ତର (2) ଚିହ୍ନିତ କରନ୍ତୁ।

ଯଦି ତାଙ୍କୁ ତିନିଙ୍କ ପାଖକୁ ପଠାଯିବା ଉଚିତ୍ ତେବେ ଉତ୍ତର (3) ଚିହ୍ନିତ କରନ୍ତୁ।

ଯଦି ଆବଶ୍ୟକ ହୁଏ ତାଙ୍କୁ ଠିକାରେ ନିଯୁକ୍ତି ଦିଆଯାଇପାରେ ତେବେ ଉତ୍ତର (4) ଚିହ୍ନିତ କରନ୍ତୁ।

ପ୍ରକାଶ ସିଂହା ତିନି ବର୍ଷ ହେଲା ଏକ ସରକାରୀ ପ୍ରତିଷ୍ଠାନରେ ଲାଇବ୍ରେରିଆନ୍ ଭାବରେ କାମ କରୁଛନ୍ତି। ଏହା ପୂର୍ବରୁ ସେ ଲାଇବ୍ରେରୀ ସାଇନ୍ସରେ ତାଙ୍କର ପିଏଚ୍ଡି ଡିଗ୍ରୀ ଶେଷ କରିବା ପରେ 7 ବର୍ଷ ଧରି ୟୁନାଇଟି ଲାଇବ୍ରେରିଆନ୍ ଭାବରେ କାମ କରୁଥିଲେ। ସେ 1991 ମସିହାରେ ଲାଇବ୍ରେରୀ ସାଇନ୍ସରେ 68% ସହିତ ସ୍ନାତକ ଲାଭ କରିଛନ୍ତି। ତାଙ୍କର ବୟସ ନିର୍ଦ୍ଧାରିତ ତାରିଖରେ ଠିକ୍ 40 ବର୍ଷ ହେଉଛି।

- A) 1
- B) 2
- C) 3
- D) 4

21) M is the brother of K. T is the only sister of M. R is the mother of M. J is the husband of R. How many sons does J have?

- A) 1
- B) 2
- C) 3
- D) 4

21) M ହେଉଛନ୍ତି Kଙ୍କର ଭାଇ। T ହେଉଛନ୍ତି Mଙ୍କର ଏକମାତ୍ର ଭଉଣୀ। R ହେଉଛନ୍ତି Mଙ୍କର ମାଆ। J ହେଉଛନ୍ତି R କର ସ୍ବାମୀ। ତେବେ J କର କେତୋଟି ପୁଅ ଅଛନ୍ତି?

- A) 1
- B) 2
- C) 3
- D) 4

22) There are six members A, B, C, D, S, K in a family in which there are three ladies and one couple. A is the mother of C and D is the son of C. Husband of A is B and C is her son while K is her daughter. The group of ladies is

- A) S K A
- B) A B C
- C) A S D
- D) S A C

22) ଗୋଟିଏ ପରିବାରରେ ଛଅ ଜଣ ସଦସ୍ୟ A, B, C, D, S, K ଅଛନ୍ତି, ସେମାନଙ୍କ ମଧ୍ୟରେ ତିନି ଜଣ ମହିଳା ଓ ଗୋଟିଏ ଦମ୍ପତି ଅଛନ୍ତି। A ହେଉଛନ୍ତି C କର ମାଆ ଏବଂ D ହେଉଛନ୍ତି C କର ପୁଅ। A କର ସ୍ୱାମୀ ହେଉଛନ୍ତି B ଏବଂ C ହେଉଛନ୍ତି ତାଙ୍କର ପୁଅ ଯେତେବେଳେ କି K ହେଉଛନ୍ତି ତାଙ୍କର ଝିଅ। ମହିଳାମାନଙ୍କର ଗୋଷ୍ଠୀ ହେଉଛି

- A) S K A
- B) A B C
- C) A S D
- D) S A C

23) Choose the word which is least like the other words in the group

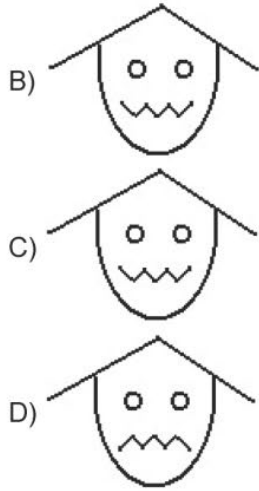
- A) Democracy
- B) Dictatorship
- C) Monarchy
- D) Economy

23) ଏହି ଗୋଷ୍ଠୀର ଅନ୍ୟ ଶବ୍ଦ ସହିତ ସର୍ବନିମ୍ନ ସାଦୃଶ୍ୟତା ରହିଥିବା ଶବ୍ଦଟିକୁ ଚୟନ କରନ୍ତୁ।

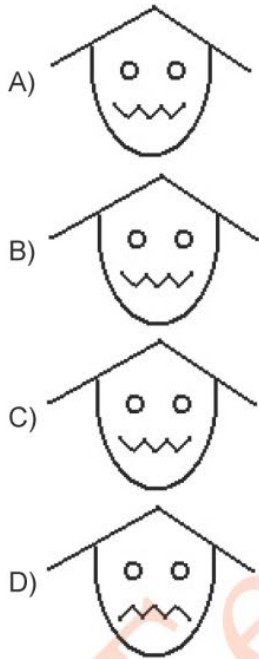
- A) ଗଣତନ୍ତ୍ର
- B) ଏକଚକ୍ରବାଦ
- C) ରାଜତନ୍ତ୍ର
- D) ଅର୍ଥବ୍ୟବସ୍ଥା

24) . Which is the odd one out among the four?





24) ଏହି ଚାରୋଟି ମଧ୍ୟରୁ କେଉଁଟି ଭିନ୍ନ ଅଟେ?



25) Three of the below given pair of numbers are similar in a certain logical way. Find the pair which is NOT similar.

- A) 121 : 13
- B) 169 : 13
- C) 441 : 21
- D) 625 : 25

25) ନିମ୍ନରେ ଦିଆଯାଇଥିବା ତିନୋଟି ସଂଖ୍ୟାର ଯୋଡ଼ା ମଧ୍ୟରେ ଏକ ନିର୍ଦ୍ଦିଷ୍ଟ ଡର୍କ ଅନୁଯାୟୀ ସାଦୃଶ୍ୟତା ରହିଛି। ସଦୃଶ ନ ଥିବା ଯୋଡ଼ାଟିକୁ ନିର୍ଣ୍ଣୟ କରନ୍ତୁ।

- A) 121 : 13
- B) 169 : 13
- C) 441 : 21
- D) 625 : 25

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Section 3 - Paper I Computer Literacy

No. of Questions: 10

26) What is the purpose of Ctrl+B in word document?

- A) It deletes the selected text.
 - B) It makes uppercase character for selected text
 - C) It makes bold for selected text
 - D) It updates the word document.
-

26) Word ଡକ୍ୟୁମେଣ୍ଟରେ Ctrl+B ର ଉଦ୍ଦେଶ୍ୟ କଣ?

- A) ଏହା ଚୟନିତ ଟେକ୍ସ୍ଟ କୁ ଡିଲିଟ୍ କରେ
 - B) ଏହା ଚୟନିତ ଟେକ୍ସ୍ଟ ପାଇଁ ଅପରକେସ୍ ବର୍ଣ୍ଣ ତିଆରି କରେ
 - C) ଏହା ଚୟନିତ ଟେକ୍ସ୍ଟକୁ ବୋଲ୍ଡ କରିଥାଏ
 - D) ଏହା Word ଡକ୍ୟୁମେଣ୍ଟ କୁ ଅପଡେଟ୍ କରେ
-

27) Which of the following is a shortcut key used to start a slide show from the beginning in MS Powerpoint?

- A) F5
 - B) F3
 - C) F6
 - D) F8
-

27) ନିମ୍ନଲିଖିତ ମଧ୍ୟରୁ କେଉଁଟି MS-PowerPoint ରେ ଏକ ସ୍ଲାଇଡ୍-ଶୋକୁ ଆରମ୍ଭରୁ ଚାଲୁ କରିବାକୁ ବ୍ୟବହୃତ ଏକ ସର୍ଟକଟ୍ Key ଅଟେ?

- A) F5
 - B) F3
 - C) F6
 - D) F8
-

28) Which device is used for inputs in gaming?

- A) Speaker
- B) Monitor
- C) Joystick
- D) Graphics Card

28) ଗେମିଂ ରେ ଇନ୍ଦ୍ରିୟ ପାଇଁ କେଉଁ ଡିଭାଇସ୍ ବ୍ୟବହୃତ ହୁଏ?

- A) ସ୍ପିକର୍
- B) ମନିଟର
- C) ଜୟଷ୍ଟିକ୍
- D) ଗ୍ରାଫିକ୍ସ କାର୍ଡ

29) Which one of the following unit of the CPU is responsible for Calculations ?

- A) CU
- B) ALU
- C) Both ALU and CU
- D) MU

29) CPU ର ନିମ୍ନଲିଖିତ ଯୁନିଟ୍ ମଧ୍ୟରୁ କେଉଁଟି ଗଣନା ପାଇଁ ଉଦ୍ଦିଷ୍ଟ?

- A) CU
- B) ALU
- C) Both ALU and CU
- D) MU

30) Which of the following data can be represented by using barcodes?

- A) Binary
- B) Grey
- C) Digital
- D) Alphanumeric

30) ବାରକୋଡ୍ ବ୍ୟବହାର କରି ନିମ୍ନଲିଖିତ ମଧ୍ୟରୁ କେଉଁ ତାତା ଉପସ୍ଥାପିତ କରାଯାଇପାରିବ?

- A) ବାଇନାରୀ
- B) ଗ୍ରେ
- C) ଡିଜିଟାଲ୍
- D) ଆଲଫାନୁମେରିକ୍

31) Google Drive is one of the most popular programs using

- A) MainFrame Technology
- B) Internet Technology
- C) Client-Server Technology
- D) Cloud- Computing Technology

31) ଲୋକପ୍ରିୟ ଗ୍ରୋଗ୍ରାମ୍ ଗୁଗୁଲ୍ ଡ୍ରାଇଭ୍ କଣ ବ୍ୟବହାର କରେ?

- A) ମେନ୍ ଫ୍ରେମ୍ ଟେକ୍ନୋଲୋଜି
- B) ଇଣ୍ଟରନେଟ୍ ଟେକ୍ନୋଲୋଜି
- C) କ୍ଲାଇଣ୍ଟ-ସର୍ଭର ଟେକ୍ନୋଲୋଜି
- D) କ୍ଲଉଡ୍ - କମ୍ପ୍ୟୁଟିଂ ଟେକ୍ନୋଲୋଜି

32) CPU means:

- A) Central processing uniform
- B) Central printing unit
- C) Central processing unit
- D) Central power unit

32) CPU ର ଅର୍ଥ ହେଉଛି:

- A) Central processing uniform
- B) Central printing unit
- C) Central processing unit
- D) Central power unit

33) Which Portal for farmers enables all Central and State government organizations in agriculture and allied sectors to give information/services/advisories to farmers by SMS in their language?

- A) mKisan
- B) mKrushak
- C) mAgriCulture
- D) mKrisi



33) କୃଷକମାନଙ୍କ ପାଇଁ କେଉଁ ପୋର୍ଟାଲ କୃଷି ଏବଂ ସହଯୋଗୀ କ୍ଷେତ୍ରର ସମସ୍ତ କେନ୍ଦ୍ର ଏବଂ ରାଜ୍ୟ ସରକାରୀ ସଂଗଠନକୁ ସେମାନଙ୍କ ଭାଷାରେ ଏସଏମଏସ ଦ୍ୱାରା କୃଷକମାନଙ୍କୁ ସୂଚନା/ସେବା/ପରାମର୍ଶ ଦେବାରେ ସକ୍ଷମ କରିଥାଏ?

- A) mKisan
- B) mKrushak
- C) mAgriCulture
- D) mKrisi

34) Which of the following is an E-mail Client?

- A) Microsoft outlook
- B) qualcomm
- C) microsoft powerpoint
- D) mail navigator

34) ନିମ୍ନଲିଖିତ ମଧ୍ୟରୁ କେଉଁଟି ଏକ ଇ-ମେଲ୍ କ୍ଲାଇଣ୍ଟ୍?

- A) Microsoft outlook
- B) qualcomm
- C) microsoft powerpoint
- D) mail navigator

35) Which of the following is not an instant messaging platform?

- A) Whatsapp
- B) Telegram
- C) Messenger
- D) Gmail

35) ନିମ୍ନଲିଖିତ ମଧ୍ୟରୁ କେଉଁଟି ଏକ ଇନଷ୍ଟାଣ୍ଟ ମେସେଜିଂ ପ୍ଲାଟଫର୍ମ ନୁହେଁ?

- A) Whatsapp
- B) Telegram
- C) Messenger
- D) Gmail



Section 4 - Paper I Pedagogy and Evaluation

No. of Questions: 15

36) Which of the following statements are TRUE?

- 1) TLMs capture the attention of learners in a classroom
- 2) TLMs bring about a temporary retention of information.

- A) Only 1 is TRUE
- B) Onlt 2 is TRUE
- C) Both 1 and 2 are TRUE
- D) Neither 1 nor 2 is TRUE

36) ନିମ୍ନଲିଖିତ ଉଚ୍ଚଗୁଡ଼ିକ ମଧ୍ୟରୁ କେଉଁଟି ସତ୍ୟ ଅଟେ?

- 1) ଶିକ୍ଷାଦାନ-ଶିକ୍ଷଣ- ସାମଗ୍ରୀ (TLMs) ଏକ ଶ୍ରେଣୀଗୃହରେ ଶିକ୍ଷାର୍ଥୀମାନଙ୍କର ଧ୍ୟାନ ଆକର୍ଷଣ କରନ୍ତି।
- 2) ଶିକ୍ଷାଦାନ-ଶିକ୍ଷଣ- ସାମଗ୍ରୀ (TLMs) ସୂଚନାର ଏକ ଅସ୍ଥାୟୀ ଧାରଣ ଆଣିଥାଏ।

- A) କେବଳ 1 ସତ୍ୟ ଅଟେ
- B) କେବଳ 2 ସତ୍ୟ ଅଟେ
- C) 1 ଏବଂ 2 ଉଭୟ ସତ୍ୟ ଅଟନ୍ତି
- D) 1 କିମ୍ବା 2 କୌଣସିଟି ମଧ୍ୟ ସତ୍ୟ ନୁହେଁ

37) TLMs are tools that can make a learner learn a concept with

- A) ease
- B) difficulty
- C) boredom
- D) confusion

37) ଶିକ୍ଷାଦାନ-ଶିକ୍ଷଣ- ସାମଗ୍ରୀ (TLMs) ହେଉଛି ସେହି ଉପକରଣ ଯାହା ଦ୍ୱାରା କୌଣସି ଶିକ୍ଷାର୍ଥୀକୁ ଏକ ପ୍ରତ୍ୟୟ କିପରି ଭାବେ ଶିଖା ଯାଇପାରେ?

- A) ସହଜ
- B) କଷ୍ଟ
- C) ବିରସତା
- D) ଦ୍ୱନ୍ଦ୍ୱ

38) Which of the following is a feature of learner centered approach?

- A) Learners are active participants
- B) Teachers engage the students
- C) Teachers decide on the content
- D) Learners are dependent on teachers

38) ନିମ୍ନଲିଖିତ ମଧ୍ୟରୁ କେଉଁଟି ଶିକ୍ଷାର୍ଥୀ କୈନ୍ଦ୍ରିକ ଆଭିମୁଖ୍ୟର ଏକ ବିଶେଷତା ଅଟେ?

- A) ଶିକ୍ଷାର୍ଥୀମାନେ ସକ୍ରିୟ ଅଂଶଗ୍ରହଣକାରୀ
- B) ଶିକ୍ଷକମାନେ ଛାତ୍ରମାନଙ୍କୁ ନିୟୋଜିତ କରନ୍ତି
- C) ଶିକ୍ଷକମାନେ ବିଷୟବସ୍ତୁ ଉପରେ ନିଷ୍ପତ୍ତି ନିଅନ୍ତି
- D) ଶିକ୍ଷାର୍ଥୀମାନେ ଶିକ୍ଷକମାନଙ୍କ ଉପରେ ନିର୍ଭରଶୀଳ

39) Which of the following is an objective type of test?

- A) writing an essay
- B) oral presentation
- C) true-false
- D) collaborative project

39) ନିମ୍ନଲିଖିତ ମଧ୍ୟରୁ କେଉଁଟି ଏକ ବସ୍ତୁନିଷ୍ଠ (ଅବଜେକ୍ଟିଭ୍) ପ୍ରକାରର ପରୀକ୍ଷା ଅଟେ?

- A) ଏକ ପ୍ରବନ୍ଧ ଲେଖିବା
- B) ମୌଖିକ ଉପସ୍ଥାପନା
- C) ସତ୍ୟ-ମିଥ୍ୟା
- D) ସହଯୋଗୀ ପ୍ରକଳ୍ପ

40) Diagnostic evaluation is specially conducted to identify and remove

- A) the learning difficulties of learner
- B) the difficulties in placement
- C) the difficulties of management
- D) the difficulties in administering the test

40) କାହାର ଚିହ୍ନଟ ଏବଂ ଅପସାରଣ ପାଇଁ ନୈଦାନିକ ମୂଲ୍ୟାୟନ ସ୍ୱତନ୍ତ୍ର ଭାବରେ କରାଯାଏ?

- A) ଶିକ୍ଷାର୍ଥୀଙ୍କର ଶିକ୍ଷଣ ଅସୁବିଧା
- B) ଅନୁସ୍ଥାପନ କରିବାରେ ଅସୁବିଧା
- C) ପରିଚାଳନା କରିବାରେ ଅସୁବିଧା
- D) ପରୀକ୍ଷଣ ପରିଚାଳନା କରିବାରେ ଅସୁବିଧା

41) Knowing students' strengths and weaknesses can help a teacher to better plan what to teach and how to teach it. Which of the following assessments can be used for such planning?

- A) Summative Assesment
- B) Diagnostic evaluation
- C) Placement evaluation
- D) Post Assesment

41) ଶିକ୍ଷାର୍ଥୀମାନଙ୍କର ଶକ୍ତି ଏବଂ ଦୁର୍ବଳତା ଜାଣିଥିବା ଜଣେ ଶିକ୍ଷକ କ'ଣ ଶିକ୍ଷାଦାନ କରବେ ଏବଂ କିପରି ଶିକ୍ଷା ଦାନ କରିବେ ତାହା ଏକ ଭଲ ଯୋଜନା କରିବାରେ ସାହାଯ୍ୟ କରେ। ଏହିପରି ଯୋଜନା ପାଇଁ ନିମ୍ନଲିଖିତ ନିର୍ଦ୍ଧାରଣ ମଧ୍ୟରୁ କେଉଁଟି ବ୍ୟବହାର କରାଯାଇପାରିବ?

- A) ସମାପ୍ତି ସୂଚକ ନିର୍ଦ୍ଧାରଣ
- B) ନୈଦାନିକ ମୂଲ୍ୟାୟନ
- C) ବ୍ୟବସ୍ଥାନ ମୂଲ୍ୟାୟନ
- D) ପରବର୍ତ୍ତୀ ନିର୍ଦ୍ଧାରଣ

42) Summative Assessment is

- A) Assessment of learning
- B) Assessment as learning
- C) Assessment of learners
- D) Assessment for learning

42) ସମାପ୍ତି ସୂଚକ ନିର୍ଦ୍ଧାରଣ ହେଉଛି -

- A) ଶିକ୍ଷଣର ନିର୍ଦ୍ଧାରଣ
- B) ଶିକ୍ଷଣ ଭାବରେ ନିର୍ଦ୍ଧାରଣ
- C) ଶିକ୍ଷାର୍ଥୀ ମାନଙ୍କର ନିର୍ଦ୍ଧାରଣ
- D) ଶିକ୍ଷଣ ପାଇଁ ନିର୍ଦ୍ଧାରଣ

43) The Zone of Proximal Development (ZPD) is a concept proposed by

- A) Piaget
- B) Vygotsky
- C) Piaget and Vygotsky
- D) Bruner

43) ଜୋନ୍ ଅଫ ପ୍ରୋକ୍ସିମାଲ ଡେଭଲପମେଣ୍ଟ (ZPD) ଏକ ଧାରଣା ଅଟେ। ଏହା କାହା ଦ୍ୱାରା ପ୍ରସ୍ତାବିତ?

- A) ପିଆଜେ
- B) ଭିଗୋଟସ୍କି
- C) ପିଆଜେ ଏବଂ ଭିଗୋଟସ୍କି
- D) ବ୍ରୁନର୍

44) Which of the following statements is a TRUE statement?

- A) Cognitivists perspective focused on hidden behavior whereas behaviorists concentrated on role of internal cognitive processes in learning
- B) Behaviorist perspective focused on hidden behavior whereas cognitivists concentrated on role of external cognitive processes in learning
- C) Cognitivists perspective focused on observable behavior whereas behaviorists concentrated on role of internal cognitive processes in learning
- D) Behaviorist perspective focused on observable behavior whereas cognitivists concentrated on role of internal cognitive processes in learning

44) ନିମ୍ନଲିଖିତ ବିବୃତ୍ତିଗୁଡ଼ିକ ମଧ୍ୟରୁ କେଉଁଟି ସତ୍ୟ ଅଟେ?

- A) ଜ୍ଞାନବାଦୀମାନଙ୍କ ଦୃଷ୍ଟିକୋଣ ଲୁଚାଯିତ ଆଚରଣ ଉପରେ ଧ୍ୟାନ ଦେଇଥାଏ ଯେତେବେଳେ ଆଚରଣବାଦୀ ଶିକ୍ଷଣରେ ଆଭ୍ୟନ୍ତରୀଣ ବୌଦ୍ଧିକ ପ୍ରକ୍ରିୟାର ଭୂମିକା ଉପରେ ଧ୍ୟାନ ଦେଇଥାନ୍ତି।
- B) ଆଚରଣବାଦୀଙ୍କ ଦୃଷ୍ଟିକୋଣ ଲୁଚାଯିତ ଆଚରଣ ଉପରେ ଧ୍ୟାନ ଦେଇଥାଏ ବେଳେ ଜ୍ଞାନବାଦୀମାନେ ଶିକ୍ଷଣରେ ବାହ୍ୟ ବୌଦ୍ଧିକ ପ୍ରକ୍ରିୟାର ଭୂମିକା ଉପରେ ଧ୍ୟାନ ଦେଇଥାନ୍ତି।
- C) ଜ୍ଞାନବାଦୀମାନଙ୍କ ଦୃଷ୍ଟିକୋଣ ନିରୀକ୍ଷଣଯୋଗ୍ୟ ଆଚରଣ ଉପରେ ଧ୍ୟାନ ଦେଇଥାଏ ବେଳେ ଆଚରଣବାଦୀ ଶିକ୍ଷଣରେ ଆଭ୍ୟନ୍ତରୀଣ ବୌଦ୍ଧିକ ପ୍ରକ୍ରିୟାର ଭୂମିକା ଉପରେ ଧ୍ୟାନ ଦେଇଥାନ୍ତି।
- D) ଆଚରଣବାଦୀଙ୍କ ଦୃଷ୍ଟିକୋଣ ନିରୀକ୍ଷଣଯୋଗ୍ୟ ଆଚରଣ ଉପରେ ଧ୍ୟାନ ଦେଇଥାଏ ବେଳେ ଜ୍ଞାନବାଦୀମାନେ ଶିକ୍ଷଣରେ ଆଭ୍ୟନ୍ତରୀଣ ବୌଦ୍ଧିକ ପ୍ରକ୍ରିୟାର ଭୂମିକା ଉପରେ ଧ୍ୟାନ ଦେଇଥାନ୍ତି।

45) In which approach do the learners choose what they will learn, how they will learn and how they will assess their own learning?

- A) Learner centered approach
- B) Learning centered approach
- C) Teacher centered approach
- D) Teaching centric approach

45) ଯେଉଁ ପଦ୍ଧତିରେ ଶିକ୍ଷାର୍ଥୀମାନେ ନିଜେ କ'ଣ ଶିଖିବେ, କିପରି ଶିଖିବେ ଏବଂ ନିଜସ୍ୱ ଶିକ୍ଷଣର ମୂଲ୍ୟାଙ୍କନ କିପରି ହେବ ତାହା ବାଛିବି, ତାହାକୁ କ'ଣ କୁହାଯାଏ?

- A) ଶିକ୍ଷାର୍ଥୀ କେନ୍ଦ୍ରିକ ଆଭିମୁଖ୍ୟ
- B) ଶିକ୍ଷଣ କେନ୍ଦ୍ରିକ ଆଭିମୁଖ୍ୟ
- C) ଶିକ୍ଷକ କେନ୍ଦ୍ରିକ ଆଭିମୁଖ୍ୟ
- D) ଶିକ୍ଷାଦାନ କେନ୍ଦ୍ରିକ ଆଭିମୁଖ୍ୟ

46) Which of the following along with teaching makes teaching-learning transactions effective?

- A) Competing
- B) Punishing
- C) Testing
- D) Procastinating

46) ଶିକ୍ଷାଦାନ ସହିତ ନିମ୍ନଲିଖିତ ମଧ୍ୟରୁ କେଉଁଟି ଶିକ୍ଷାଦାନ-ଶିକ୍ଷଣ ନେଣଦେଣକୁ ପ୍ରଭାବଶାଳୀ କରିଥାଏ?

- A) ପ୍ରତିଯୋଗିତା
- B) ଦଣ୍ଡ
- C) ପରୀକ୍ଷଣ
- D) କାଳକ୍ଷେପଣ

47) The public examinations conducted by the appropriate school boards are

- A) Internal assessment
- B) Informal assessment
- C) External assessment
- D) Equality assessment

47) ଉପଯୁକ୍ତ ବିଦ୍ୟାଳୟ ବୋର୍ଡ ଦ୍ଵାରା ପରିଚାଳିତ ସର୍ବସାଧାରଣ ପରୀକ୍ଷାକୁ କୁହାଯାଏ

- A) ଆଭ୍ୟନ୍ତରୀଣ ନିର୍ଦ୍ଧାରଣ
- B) ଅନୌପଚାରିକ ନିର୍ଦ୍ଧାରଣ
- C) ବାହ୍ୟ ନିର୍ଦ୍ଧାରଣ
- D) ସମତା ନିର୍ଦ୍ଧାରଣ

48) Children speaking to themselves while solving a word problem in mathematics is termed as

- A) Private speech
- B) Framing speech
- C) External speech
- D) Community speech

48) ଗଣିତରେ ଏକ ଶବ୍ଦ ସମସ୍ୟାର ସମାଧାନ କରିବା ସମୟରେ ପିଲାମାନେ ନିଜେ ନିଜ ସହିତ କଥାବାର୍ତ୍ତା କରିବାକୁ କ'ଣ କୁହାଯାଏ?

- A) ସ୍ଵ କଥନ
- B) କଥନ ଗଠନ
- C) ବାହ୍ୟ କଥନ
- D) ସମ୍ପ୍ରଦାୟ କଥନ

49) A toddler attempting to walk is helped by her parent by holding hands providing support is an example for

- A) knowledge adaptation
- B) knowledge construction
- C) zone of proximal development
- D) scaffolding

49) ଚାଲିବାକୁ ଚେଷ୍ଟା କରୁଥିବା ଏକ ଛୋଟ ପିଲାକୁ ତାଙ୍କ ପିତାମାତା ହାତ ଧରି ତାକୁ ସାହାଯ୍ୟ କରନ୍ତି। ଏହା କାହାର ଏକ ଉଦାହରଣ ଅଟେ?

- A) ଜ୍ଞାନର ଅନୁକୂଳନ
- B) ଜ୍ଞାନର ନିର୍ମାଣ
- C) ନିକଟବର୍ତ୍ତୀ ବିକାଶର କ୍ଷେତ୍ର
- D) ସ୍କାଫୋଲ୍ଡିଂ

50) Which approach stresses on individuality of a child?

- A) Humanistic and cognitive approaches
- B) Humanistic approach
- C) Behavioristic and cognitive approach
- D) Cognitive approach

50) କେଉଁ ଆଭିମୁଖ୍ୟ ଶିଶୁର ବ୍ୟକ୍ତିଗତତା ଉପରେ ଚାପ ପକାଇଥାଏ?

- A) ମାନବବାଦୀ ଏବଂ ବୌଦ୍ଧିକ ଆଭିମୁଖ୍ୟ
- B) ମାନବବାଦୀ ଆଭିମୁଖ୍ୟ
- C) ଆଚରଣବାଦୀ ଏବଂ ବୌଦ୍ଧିକ ଆଭିମୁଖ୍ୟ
- D) ବୌଦ୍ଧିକ ଆଭିମୁଖ୍ୟ

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Section 5 - Paper II Physics

No. of Questions: 30

51) The resistance of a wire is $10\ \Omega$. Its length is increased by 10% by stretching. The new resistance will now be

- A) $12.1\ \Omega$
 - B) $1.2\ \Omega$
 - C) $13\ \Omega$
 - D) $11\ \Omega$
-

52) Which of the following is vector quantity?

- A) Current density
 - B) Wattless current
 - C) Current
 - D) Power
-

53) An unknown resistance R_1 is connected in series with a resistance of $10\ \Omega$. This combination is connected to one gap of a metre bridge while a resistance R_2 is connected in the other gap. The balance point is at 50 cm. Now, when the $10\ \Omega$ resistance is removed, the balance point shifts to 40 cm. What is the value of R_1 ?

- A) $40\ \Omega$
 - B) $30\ \Omega$
 - C) $20\ \Omega$
 - D) $10\ \Omega$
-

54) The resistance of an ideal voltmeter is

- A) Zero
 - B) Very low
 - C) Very high
 - D) Infinite
-

55) The coil of area $0.2\ \text{m}^2$ has 500 turns. After placing the coil in a magnetic field of strength $4 \times 10^{-4}\ \text{Wb/m}^2$, if rotated through 90 degrees in 0.2 s, the average emf induced in the coil is

- A) 0.012 V
- B) 0.05 V
- C) 0.1 V
- D) 0.2 V

56) A car has a fresh battery of e.m.f. 12 V and internal resistance of 0.05Ω . If the starter motor draws a current of 90 A, the terminal voltage when the starter is on will be

- A) 12 V
- B) 10.5 V
- C) 8.5 V
- D) 7.5 V

57) A body has $-80 \mu\text{C}$ of charge. Number of additional electrons in it will be

- A) 8×10^{14}
- B) 8×10^{-14}
- C) 5×10^{14}
- D) 5×10^{-14}

58) A spherical condenser has inner and outer spheres of radii a and b respectively. The space between the two is filled with air. The difference between the capacities of two condensers formed when inner sphere is earthed and when outer sphere is earthed will be

- A) $4\pi\epsilon_0 ab$
- B) $4\pi\epsilon_0 b$
- C) Zero
- D) $4\pi\epsilon_0$

59) A condenser of $50 \mu\text{F}$ capacity is charged to 10 V. Its stored energy is equal to

- A) $2.5 \times 10^{-3} \text{ J}$
- B) $2.5 \times 10^{-2} \text{ J}$
- C) $5 \times 10^2 \text{ J}$
- D) $2 \times 10^4 \text{ J}$

60) The weight of a body at the centre of the earth is

- A) Zero
- B) Infinte
- C) Same as on the Earth's surface
- D) Double as compared to weight on surface of Earth

61) If the value of g at the surface of the earth is 9.8 m/s^2 , then the value of g at a place 480 km above the surface of the earth will be
(Radius of the earth is 6400 km)

- A) 8.5 m/s^2
- B) 9.8 m/s^2
- C) 7.2 m/s^2
- D) 4.2 m/s^2

62) At what altitude (in metres), the acceleration due to gravity is 25% of that at the Earth's surface?
(Radius of Earth = R metres)

- A) $R/4$
- B) R
- C) $3R/8$
- D) $R/2$

63) The power utilised by an engine which performs a work of 1250 J in 5 seconds is:

- A) 125 W
- B) 250 W
- C) 312 W
- D) 625 W

64) An external force is being used to maintain oscillation in a body and then the body oscillates with a natural frequency which is equal to the frequency of the external agency. These oscillations are called:

- A) Free oscillations
- B) Forced oscillations
- C) Damped oscillations
- D) Periodic oscillations

65) If period ' T ' is the time required to complete one oscillation, then the relation connecting the frequency ' f ' with period is given by:

- A) $f=1/T$
- B) $f=T$
- C) $f=2T$
- D) $f=1/2T$

66) The angular frequency ' ω ' of oscillations of a block of mass ' m ' which is pushed down and released when connected to an elastic spring of spring constant ' k ' and executing simple harmonic motion is

- A) $\omega = 2k/m$
 - B) $\omega = k^2/m$
 - C) $\omega = k/m$
 - D) $\omega = (k/m)^{1/2}$
-

67) When a particle is found to execute simple harmonic motion, the value of acceleration at the mean position is

- A) infinite
 - B) maximum
 - C) zero
 - D) fluctuating
-

68) When an incident plane wavefront is passed through the prism, then the emerging wavefront will be

- A) spherical
 - B) plane
 - C) tilted
 - D) conical
-

69) Read the following statements and choose the CORRECT answer.

(i) Huygens principle is essentially a geometrical construction, which given the shape of the wavefront at any time allows us to determine the shape of the wavefront at a later time.

(ii) According to Huygens principle, each point of the wavefront is the source of a secondary disturbance and the wavelets emanating from these points spread out in all directions with the speed of the wave.

- A) (i) - TRUE and (ii) - FALSE
 - B) (i) - FALSE and (ii) - TRUE
 - C) (i) - FALSE and (ii) - FALSE
 - D) (i) - TRUE and (ii) - TRUE
-

70) When two coherent light sources meet together there is a distribution of energy and this superposition leads to the phenomenon of

- A) reflection
- B) refraction
- C) diffraction
- D) interference

71) If the focal length of the eye piece of a telescope with magnifying power 'M' is doubled then its new magnifying power will be

- A) $M/2$
- B) M
- C) 2M
- D) 4M

72) The power of a concave lens is $-4D$. The focal length of the lens is

- A) -50 cm
- B) -25 cm
- C) +50 cm
- D) +25 cm

73) Streamline flow is more likely for liquids with

- A) High density and low viscosity
- B) low density and high viscosity
- C) High density and high viscosity
- D) low density and low viscosity

74) Which of the following is referred as the property by virtue of which liquid opposes relative motion between its different layers?

- A) Cohesion
- B) Adhesion
- C) Viscosity
- D) Surface tension

75) Temperature and Length are

- A) extensive and intensive properties respectively
- B) intensive and extensive properties respectively
- C) intensive properties
- D) extensive properties

76) Which of the following characteristics of sound enables us to distinguish one sound from another having the same pitch and loudness?

- A) Quality
- B) Wavelength
- C) Amplitude
- D) Intensity

77) The phenomenon of rise and fall in the intensity of sound that occurs when two interfering sound waves of nearly (but not exactly) equal frequencies are produced simultaneously is termed as:

- A) Interference
- B) Beats
- C) Refraction
- D) Standing waves

78) The time interval between two successive maxima of sound when two waves of almost equal frequencies f_1 and f_2 reach at a point simultaneously is

- A) $f_2 - f_1$
- B) $1/f_1 - f_2$
- C) f_2/f_1
- D) f_1/f_2

79) When an observer and the source are moving in the same direction and with same velocity along the propagation of sound, then the frequency is found to

- A) increase
- B) be the same
- C) decrease
- D) be infinite

80) With the increase in temperature (T), the velocity of sound is found to vary by

- A) $(T)^{1/2}$
- B) $1/T$
- C) $1/(T)^{1/2}$
- D) T

Section 6 - Paper II Chemistry

No. of Questions: 30

81) What should be the molecular mass of potassium permanganate in acid medium?

- A) 2 x equivalent mass
 - B) 3 x equivalent mass
 - C) 4 x equivalent mass
 - D) 5 x equivalent mass
-

82) Which of the following gives the number of moles of atoms?

- A) Avogadro's number / number of atoms
 - B) Number of atoms / Avogadro's number
 - C) Mass of the substance / number of atoms
 - D) Mass of the substance x number of atoms
-

83) What is the equivalent mass of potassium dichromate?

- A) 31.6
 - B) 158
 - C) 49
 - D) 296
-

84) Which of the following has metallic bond?

- A) Nitrogen
 - B) Copper
 - C) Chlorine
 - D) Oxygen
-

85) Which of the following molecule has octahedral structure?

- A) CH₄
- B) PCl₅
- C) SF₆
- D) NH₃

86) What is the percentage of 's' character and 'p' character in sp^3 hybridised orbital?

- A) 25 % 's' character and 75 % 'p' character
- B) 50 % 's' character and 50 % 'p' character
- C) 33.3 % 's' character and 66.6 % 'p' character
- D) 75 % 's' character and 25 % 'p' character

87) The effect of a change in concentration on systems at equilibrium can be explained as follows using Le Chatelier's principle?

- A) When the concentration of reactant is increased, the system tries to reduce their concentration by favoring backward reaction.
- B) When the concentration of reactant is increased, the system tries to reduce their concentration by favoring forward reaction.
- C) When the concentration of reactant is decreased, the system tries to increase their concentration by favoring forward reaction.
- D) When the concentration of product is increased, the system tries to reduce their concentration by favoring forward reaction.

88) Which of the following is the correct expression for acidic solution?

- A) $pH < 7$
- B) $pH > 7$
- C) $pH = 7$
- D) $pOH = 7$

89) Calculate the pOH of 0.02M NH_3 solution. [The ionization constant K_b for NH_3 is 1.8×10^{-5} at 298K; $\log 6 = 0.7782$]

- A) 2.2218
- B) 3.2218
- C) 2.7782
- D) 3.7782

90) In which of the following compounds, oxidation number of an element is fractional?

- A) FeO
- B) Fe_2O_3
- C) Cr_2O_3
- D) Fe_3O_4

91) What volume of 0.2N HCl is required to neutralize 50 ml of 0.1N NaOH?

- A) 25 ml
- B) 20 ml
- C) 30 ml
- D) 40 ml

92) What is the oxidation number of Cr in $K_2Cr_2O_7$ and $Cr_2(SO_4)_3$ for the reaction, $K_2Cr_2O_7 + 4H_2SO_4 \rightarrow K_2SO_4 + Cr_2(SO_4)_3 + 4H_2O + 3O_2$?

- A) 7,3
- B) 3,7
- C) 6, 3
- D) 3,6

93) Which of the following statement is correct?

- A) Atomic radii decrease along the period and increase down the group
- B) Atomic radii increase along the period and decrease down the group
- C) Atomic radii increase along the period and increase down the group
- D) Atomic radii decrease along the period and decrease down the group

94) Which of the following represent the valency shell electronic configuration of $4s^2 4p^3$ in the modern periodic table?

- A) Group 15 and period 4
- B) Group 15 and period 5
- C) Group 16 and period 4
- D) Group 16 and period 5

95) Which of the following statement is true regarding the electron affinity of elements?

- A) $O > Se > S > Te$
- B) $O > S > Se > Te$
- C) $S > O > Se > Te$
- D) $S > O > Te > Se$

96) Which of the following metal is extracted from the ore bauxite?

- A) Iron
- B) Copper
- C) Zinc
- D) Aluminium

97) Identify the cathode and anode reactions for the electrolytic method of refining of copper.

- A) Cathode reaction: $\text{Cu} \rightarrow \text{Cu}^+ + \text{e}^-$ & Anode reaction: $\text{Cu}^+ + \text{e}^- \rightarrow \text{Cu}$
- B) Anode reaction: $\text{Cu} \rightarrow \text{Cu}^+ + \text{e}^-$ & Cathode reaction: $\text{Cu}^+ + \text{e}^- \rightarrow \text{Cu}$
- C) Cathode reaction: $\text{Cu} \rightarrow \text{Cu}^{2+} + 2\text{e}^-$ & Anode reaction: $\text{Cu}^{2+} + 2\text{e}^- \rightarrow \text{Cu}$
- D) Anode reaction: $\text{Cu} \rightarrow \text{Cu}^{2+} + 2\text{e}^-$ & Cathode reaction: $\text{Cu}^{2+} + 2\text{e}^- \rightarrow \text{Cu}$

98) What is the difference between smelting and roasting process?

- A) Smelting involves extraction of metal with oxidising agent whereas roasting involves extraction of metal with reducing agent
- B) Smelting involves extraction of metal with reducing agent whereas roasting involves extraction of metal with oxidising agent
- C) Smelting and roasting involves extraction of metal with reducing agent
- D) Smelting and roasting involves extraction of metal with oxidising agent

99) Alkynes undergo oxidation in presence of alkaline potassium permanganate produces?

- A) carboxylic acid and carbon monoxide
- B) carbonyl compounds
- C) carboxylic acid and carbon dioxide
- D) alcohols

100) In the presence of catalyst solution composed of cuprous chloride and alkali metal salt, acetylene undergoes which reaction?

- A) dimerization
- B) trimerization
- C) monomerization
- D) tetramerization

101) Which among the following is a useful reaction to prepare aldehydes, ketones, and carboxylic acids from alkenes?

- A) Osmosis
- B) Ozonolysis
- C) epoxidation
- D) Cannizzaro

102) Stability increasing order of carbonium ions is?

- A) primary > secondary < tertiary
 - B) primary < secondary < tertiary
 - C) tertiary < secondary < primary
 - D) tertiary < secondary > primary
-

103) Hydronium, nitrosonium and bromonium ions are related to

- A) nucleophiles
 - B) free-radicals
 - C) electrophiles
 - D) carbanions
-

104) The order of appearance of hybridization on C-atoms in 2-butene is

- A) sp^3, sp, sp, sp^3
 - B) sp^3, sp^2, sp^2, sp^3
 - C) sp^3, sp, sp^2, sp^3
 - D) sp^3, sp^2, sp, sp^3
-

105) Which of the following indicates Graham's law of diffusion?

- A) The rate of diffusion of a gas is inversely proportional to square root of its molecular weight
 - B) The rate of diffusion of a gas is proportional to its molecular weight
 - C) The rate of diffusion of a gas is inversely proportional to its velocity
 - D) The rate of diffusion of a gas is proportional to its velocity
-

106) Calculate the number of moles of a gas occupying 27.3 dm^3 with 3.32 bar pressure at 0°C . ($R=0.083 \text{ lit bar / mol / K}$)

- A) 2 moles
- B) 4 moles
- C) 6 moles
- D) 8 moles

107) Calculate the temperature of 8.0 moles of a gas occupying 5 dm³ at 3.32 bar. (R = 0.083 bar dm³ K⁻¹ mol⁻¹)

- A) 25 K
- B) 50 K
- C) 75 K
- D) 100 K

108) Which of the following relationship indicates "De-Broglie equation"?

- A) $E=hc/\lambda$
- B) $E=mc^2$
- C) $\lambda=h/mv$
- D) $E=Nhc/\lambda$

109) What should be the statement for "Heisenberg's uncertainty principle"?

- A) Electrons enter into different atomic orbitals in the increasing order of their energies
- B) The maximum number of electrons that an orbital that can accommodate is two
- C) Electron pairing in p, d and f orbitals cannot occur until all orbitals of a given sub-shell contains one electron each
- D) Simultaneous determination of exact position and momentum of an electron is impossible

110) Calculate the frequency of yellow radiation having wavelength 6000 Ao. [1 Ao = 10⁻¹⁰ m]

- A) 2 x 10¹⁴ Hz
- B) 1 x 10¹⁵ Hz
- C) 5 x 10¹⁴ Hz
- D) 8 x 10¹⁴ Hz

Section 7 - Paper II Mathematics

No. of Questions: 40

111) The equation of the plane passing through the points A= (1,1,1), B=(1,-1,1), C=(-7-3,-5) is

- A) $3x-z+1=0$
- B) $3x-4z+1=0$
- C) $x-4z+1=0$
- D) $3x-4z=0$

112) Equation of the sphere having the points (2,1, -3) and (1, -2,4) as the ends of the diameter is

- A) $x^2+y^2+z^2-3x+y+z-12=0$
- B) $x^2+y^2+z^2+3x+y-z-12=0$
- C) $x^2+y^2+z^2-3x-y-z-12=0$
- D) $x^2+y^2+z^2-3x+y-z-12=0$

113) If $f(x) = ax^3$, then the value of $x f'(x) - 3f(x)$ is

- A) 0
- B) 1
- C) -1
- D) 2

114) If $f(x)=x^{100}+x^{99}+x^{98}+\dots+x+1$, then the value of $f'(1)$ is

- A) 5070
- B) 5050
- C) 5060
- D) 5150

115)
$$\lim_{x \rightarrow 2} \frac{\log(x-1)}{x-2} =$$

- A) 0
- B) 1
- C) -1
- D) 2

116) Equation of a straight line can be expressed by using a

- A) linear equation
 - B) quadratic equation
 - C) cubic equation
 - D) biquadratic equation
-

117) Eccentricity of ellipse is always

- A) Zero
 - B) greater than 2
 - C) less than 1
 - D) less than 2 but greater than 1
-

118) What is the equation of the line joining the points (3,4) and (-5,-6)?

- A) $5x-4y+1=0$
 - B) $5x+4y+1=0$
 - C) $5x+4y-1=0$
 - D) $5x-4y-1=0$
-

119) Which of the given points in the x-axis is equidistant from the points (2,-5) and (-2,9)?

- A) (5,0)
 - B) (-5,0)
 - C) (7,0)
 - D) (-7,0)
-

120) What is the area (in sq. cm) of a sector of a circle whose radius is 6 cm, if the sector makes an angle of 60° at the centre?

- A) 144
- B) 132
- C) $132/7$
- D) $144/7$

121) Number of faces of a polyhedron with 30 edges and 20 vertices is

- A) 13
- B) 12
- C) 8
- D) 14

122) A big sphere is melted and recasted to 8 identical small spheres of same radius. What is the ratio of new radius of each small sphere to that of the radius of big sphere?

- A) 1:8
- B) 1:4
- C) 1:3
- D) 1:2

123) Volume (in cubic. cm.) of a largest sphere than can be inscribed in a cube of side 21 cm is

- A) 4541
- B) 4851
- C) 4581
- D) 4158

124) If three sides of a right-angled triangle are integers in their lowest form, then the length of one of its sides is always a multiple of

- A) 13
- B) 7
- C) 5
- D) 11

125) The number is divisible by 25 only, if

- A) The last digit of the number is zero
- B) The last digit of the number is 5
- C) The last two digits of the number is divisible by 15
- D) The last two digits of the number is either zeroes or divisible by 25

126) The least number which is a perfect square and has 560 as a factor is

- A) 19600
- B) 18600
- C) 17500
- D) 19200



127) What will be the remainder when 19^{100} is divided by 20?

- A) 5
 - B) 3
 - C) 9
 - D) 1
-

128) In a well shuffled pack of 52 playing cards, picking of two cards from it, can be done in

- A) 52 ways
 - B) 1326 ways
 - C) 1258 ways
 - D) 1542ways
-

129) An event containing only a single sample point is called

- A) Equally likely events
 - B) Impossible events
 - C) Possible events
 - D) Simple events
-

130) The probability of getting exactly 3 heads in a simultaneous toss of 4 coins is

- A) $1/2$
 - B) $1/3$
 - C) $1/4$
 - D) $1/5$
-

131) The probability of getting the sum as a prime number when two dice are thrown together is

- A) $5/18$
 - B) $5/12$
 - C) $4/13$
 - D) $4/17$
-

132) What is the maximum number of distinct roots a quadratic equation can have?

- A) 1
- B) 0
- C) 2
- D) 3

133) How many distinct real roots are there for the equation $x^2 - 6x + 5 = 0$?

- A) 0
- B) 1
- C) 2
- D) Infinite

134) In which of the following interval k lies so that the equation $kx^2 - 8x + k = 0$ possess real solution?

- A) (-3,3)
- B) [3,3]
- C) (-4,4)
- D) [-4,4]

135) Maximum value of the expression $5 + 4x - 4x^2$ is

- A) 5
- B) 6
- C) 1
- D) 2

136) If the roots of a quadratic equation $ax^2 + bx + 6 = 0$ are -3 and -2, then the value of 'b' is

- A) 2
- B) 3
- C) 4
- D) 5

137) If A and B are two sets such that $A \cap B = \Phi$, then which of the following must be true?

- A) $A = \Phi$ and $B = \Phi$
- B) $A = \Phi$ and $B \neq \Phi$
- C) $A \neq \Phi$ and $B = \Phi$
- D) $A = \Phi$ and/or $B = \Phi$

138) Let A and B be sets with $|B|=3$. If there are 4096 relations from A to B, then $|A|$ =

- A) 5
- B) 4
- C) 6
- D) 3

139) Gregory series gives the expansion of

- A) logarithmic function
- B) tangent function
- C) inverse tangent function
- D) exponential function

140) The series $1+(1/2) + (1/4) + (1/8)+\dots+\infty$

- A) Converges
- B) Becomes zero
- C) Oscillates
- D) Diverges

141) The sequence $\left\{ \frac{n+1}{n} \right\}$ is

- A) Increasing
- B) Decreasing
- C) Unbounded
- D) Oscillating

142) Limiting value of the sequence $\{S_n\}$, where $S_n = \left(1 + \frac{1}{n}\right)^n$

- A) $\log 2$
- B) e
- C) e^2
- D) $2e$

143) If A and B are mutually exclusive events, then $P(A \cap B)$ is

- A) 0
- B) 1
- C) -1
- D) 2

144) If $n(A)=38$, $n(B)=42$, $n(A \cup B)=60$, then $n(A \cap B)$ is

- A) 10
- B) 14
- C) 18
- D) 20

145) The middle term of the series arranged in ascending or descending order is called

- A) Mean
- B) Median
- C) Mode
- D) Standard deviation

146) What is the average of the median of the set $A = \{2, 1, 3, 6, 7, 9, 8\}$ and the mode of set $B = \{2, 3, 8, 4, 6, 8, 8, 9, 9\}$?

- A) 5
- B) 6
- C) 7
- D) 9

147) What is the value of the expression given below?

$$\cos 1^\circ \cdot \cos 2^\circ \cdot \cos 3^\circ \cdot \cos 4^\circ \dots \cos 90^\circ$$

- A) 1
- B) 90
- C) 45
- D) 0

148) π radians is equivalent to

- A) 60 degrees
 - B) 180 degrees
 - C) 90 degrees
 - D) 45 degrees
-

149) Simplify : $\sin 2A / (1 - \cos 2A)$

- A) $\tan A$
 - B) $\cot A$
 - C) $\sec A$
 - D) $\operatorname{cosec} A$
-

150) One of the general solutions of $\sin x + \sin 3x = \sin 2x$ is

- A) $n\pi$
- B) $n\pi/4$
- C) $n\pi/6$
- D) $n\pi/2$



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Answer Key

1	A	31	D	61	A	91	A	121	B
2	D	32	C	62	B	92	C	122	D
3	C	33	A	63	B	93	A	123	B
4	D	34	A	64	B	94	A	124	C
5	B	35	D	65	A	95	B	125	D
6	D	36	A	66	D	96	D	126	A
7	D	37	A	67	C	97	D	127	D
8	C	38	A	68	C	98	B	128	B
9	C	39	C	69	D	99	C	129	D
10	B	40	A	70	D	100	A	130	C
11	C	41	B	71	A	101	B	131	B
12	C	42	A	72	B	102	B	132	C
13	D	43	B	73	B	103	C	133	C
14	C	44	D	74	C	104	B	134	D
15	A	45	A	75	B	105	A	135	B
16	C	46	C	76	A	106	B	136	D
17	A	47	C	77	B	107	A	137	D
18	D	48	A	78	B	108	C	138	B
19	C	49	D	79	B	109	D	139	C
20	A	50	B	80	A	110	C	140	A
21	B	51	A	81	D	111	B	141	B
22	A	52	A	82	B	112	D	142	B
23	D	53	C	83	C	113	A	143	A
24	D	54	D	84	B	114	B	144	D
25	A	55	D	85	C	115	B	145	B
26	C	56	D	86	A	116	A	146	C
27	A	57	C	87	B	117	C	147	D
28	C	58	B	88	A	118	A	148	B
29	B	59	A	89	B	119	D	149	B
30	D	60	A	90	D	120	C	150	D

