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Section 1 - Paper I General Knowledge and Current Affairs

No. of Questions: 15

1) Which of the following cyclones hit India in May 2021?

- A) Typhoon Haiyan
 - B) Typhoon Tip
 - C) Amphan
 - D) Tauktae
-

1) ମେ 2021 ରେ ନିମ୍ନଲିଖିତ ଘୂର୍ଣ୍ଣିବାତ୍ୟା ଗୁଡ଼ିକ ମଧ୍ୟରୁ କେଉଁଟି ଭାରତକୁ ଆସିଥିଲା?

- A) ଟାଇଫୁନ୍ ହାଇୟାନ୍
 - B) ଟାଇଫୁନ୍ ଟିପ୍
 - C) ଆମ୍ଫାନ୍
 - D) ଟାଉକ୍ଟେ
-

2) In 2021, who among the following has been appointed as 48th Chief Justice of India?

- A) Justice B V Nagarathna
 - B) Justice Hima Kohli
 - C) Justice Bela M Trivedi
 - D) Justice N V Ramana
-

2) 2021 ମସିହାରେ, ନିମ୍ନଲିଖିତଙ୍କ ମଧ୍ୟରୁ କିଏ ଭାରତର 48 ତମ ପ୍ରଧାନ ବିଚାରପତି ଭାବରେ ନିଯୁକ୍ତ ହୋଇଛନ୍ତି?

- A) ଜଷ୍ଟିସ୍ ବି ଭି ନାଗରଥନା
 - B) ଜଷ୍ଟିସ୍ ହିମା କୋହଲି
 - C) ଜଷ୍ଟିସ୍ ବେଲା ଏମ୍ ତ୍ରିବେଦୀ
 - D) ଜଷ୍ଟିସ୍ ଏନ ଭି ରମଣା
-

3) What is IMR with respect to Human Development Index?

- A) Infant Mortality Rate
- B) International Mortality Rate
- C) Infant Mortality Ratio
- D) Infant Maturity Rate

3) ମାନବ ବିକାଶ ସୂଚକଙ୍କ ସମ୍ବନ୍ଧରେ IMR କଣ?

- A) ଇନ୍ଫାଣ୍ଟ ମୋର୍ଟାଲିଟି ରେଟ୍
- B) ଇଣ୍ଟରନାସନାଲ୍ ମୋର୍ଟାଲିଟି ରେଟ୍
- C) ଇନ୍ଫାଣ୍ଟ ମୋର୍ଟାଲିଟି ରେସିଓ
- D) ଇନ୍ଫାଣ୍ଟ ମାଟୁରାଲିଟି ରେଟ୍

4) Albert Einstein won the Nobel Prize in Physics for his contribution to which of the following topics?

- A) Theoretical physics
- B) Gravitational force
- C) God's Particle
- D) Practical Geometry

4) ନିମ୍ନଲିଖିତ ବିଷୟଗୁଡ଼ିକ ମଧ୍ୟରୁ କେଉଁଠିରେ ତାଙ୍କର ଅବଦାନ ପାଇଁ ଆଲବର୍ଟ ଆଇନଷ୍ଟାଇନ ପଦାର୍ଥ ବିଜ୍ଞାନରେ ନୋବେଲ ପୁରସ୍କାର ଲାଭ କରିଥିଲେ?

- A) ତତ୍ତ୍ୱିକ ପଦାର୍ଥ ବିଜ୍ଞାନ
- B) ମାଧ୍ୟାକର୍ଷଣ ଶକ୍ତି
- C) ଗତ୍ ପାର୍ଟିକଲ
- D) ପ୍ରାକ୍ଟିକାଲ୍ ଜ୍ୟାମିତି

5) Major Broughton conquered Sambalpur in 1804 by defeating which forces?

- A) Mughals
- B) Nizams
- C) Marathas
- D) Dutch

5) ମେଜର ବ୍ରୁଟନ୍ 1804 ରେ କେଉଁ ବାହିନୀକୁ ପରାସ୍ତ କରି ସମ୍ବଲପୁରକୁ ଜିତିଥିଲେ?

- A) ମୋଗଲ
- B) ନିଜାମ
- C) ମାରାଠା
- D) ଡଚ୍

6) Odisha was separated from which of the following states, after the Government of India Act of 1935 was passed?

- A) Uttar Pradesh
- B) Bihar
- C) Jharkhand
- D) Chhattisgarh

6) 1935 ର ଭାରତ ସରକାରଙ୍କ ଅଧିନିୟମ ପାସ ହେବା ପରେ, ଓଡ଼ିଶା ନିମ୍ନଲିଖିତ ମଧ୍ୟରୁ କେଉଁ ରାଜ୍ୟଗୁଡ଼ିକ ଠାରୁ ଅଲଗା ହେଲା?

- A) ଉତ୍ତରପ୍ରଦେଶ
- B) ବିହାର
- C) ଝାଡ଼ଖଣ୍ଡ
- D) ଛତିଶଗଡ଼

7) Sahara Desert spreads through which of the following country?

- A) Kuwait
- B) Qatar
- C) Morocco
- D) Oman

7) ସାହାରା ମରୁଭୂମି ନିମ୍ନ ଦେଶ ମଧ୍ୟରୁ କାହା ମଧ୍ୟଦେଇ ବିସ୍ତାର କରିଛି?

- A) କୁଏତ
- B) କାତାର
- C) ମୋରୋକ୍କୋ
- D) ଓମାନ

8) As per the Indian Constitution, which of the following options is CORRECT with reference to authorities having the power to grant pardon, and to suspend, remit or commute sentences in certain cases?

- A) The Prime Minister and the President
- B) The Chief Justices of High Courts and Supreme Court
- C) The Speakers of Lok Sabha and Rajya Sabha
- D) The President and the Governors of the states

8) ଭାରତୀୟ ସମ୍ବିଧାନ ଅନୁଯାୟୀ, ନିମ୍ନଲିଖିତ ବିକଳଗୁଡ଼ିକ ମଧ୍ୟରୁ କେଉଁଟି କ୍ଷମା ପ୍ରାର୍ଥନା କରିବା ଏବଂ କେତେକ କ୍ଷେତ୍ରରେ ଦଣ୍ଡକୁ ଛାଡ଼ି ରଖିବା, କ୍ଷମା କରିବା କିମ୍ବା ପରିବର୍ତ୍ତନ କରିବା କ୍ଷମତା ରଖୁଥିବା କର୍ତ୍ତୃପକ୍ଷଙ୍କ ସମ୍ବନ୍ଧରେ ଠିକ୍ ଅଟେ, ?

- A) ପ୍ରଧାନମନ୍ତ୍ରୀ ଏବଂ ରାଷ୍ଟ୍ରପତି
- B) ହାଇକୋର୍ଟ ଏବଂ ସର୍ବୋଚ୍ଚ ନ୍ୟାୟାଳୟର ମୁଖ୍ୟ ବିଚାରପତି
- C) ଲୋକସଭା ଏବଂ ରାଜ୍ୟସଭାର ବାଚସ୍ପତି
- D) ରାଷ୍ଟ୍ରପତି ଏବଂ ରାଜ୍ୟଗୁଡ଼ିକର ରାଜ୍ୟପାଳ

9) Which of the following statements is CORRECT with reference to Parliament houses in India?

- A) The term of Lok Sabha is 5 years unless dissolved
- B) The term of Rajya Sabha is 5 years unless dissolved
- C) Lok Sabha is a permanent body not subject to dissolution
- D) One third members of the Rajya Sabha retire every year

9) ନିମ୍ନଲିଖିତ ମଧ୍ୟରୁ କେଉଁ ବିବୃତ୍ତି ଭାରତରେ ସଂସଦ ଗୃହ ସମ୍ବନ୍ଧରେ ସଠିକ୍ ଅଟେ?

- A) ଲୋକସଭାର କାର୍ଯ୍ୟକାଳ 5 ବର୍ଷ ଅଟେ ଯଦି ଭାଙ୍ଗି ନଯାଏ
- B) ରାଜ୍ୟସଭାର କାର୍ଯ୍ୟକାଳ 5 ବର୍ଷ ଅଟେ ଯଦି ଭାଙ୍ଗି ନଯାଏ
- C) ଲୋକସଭା ଏକ ସ୍ଥାୟୀ ସଂସଦ ଯାହା ଭଙ୍ଗା ଯାଇ ପାରିବ ନାହିଁ
- D) ରାଜ୍ୟସଭାର ଏକ ତୃତୀୟାଂଶ ସଦସ୍ୟ ପ୍ରତିବର୍ଷ ଅବସର ନିଅନ୍ତି

10) In 2022, Santishree Dhulipudi Pandit was appointed as the first woman Vice-Chancellor of which of the following Universities?

- A) Indira Gandhi National Open University (IGNOU)
- B) Banaras Hindu University (BHU)
- C) Jawaharlal Nehru University (JNU)
- D) Indian Institute of Science (IISc)

10) 2022 ମସିହାରେ, ଶାନ୍ତିଶ୍ରୀ ଧୁଲିପୁଡି ପଣ୍ଡିତଙ୍କୁ ନିମ୍ନଲିଖିତ କେଉଁ ବିଶ୍ୱବିଦ୍ୟାଳୟ ଗୁଡ଼ିକ ମଧ୍ୟରୁ ପ୍ରଥମ ମହିଳା କୁଳପତି ଭାବରେ ନିଯୁକ୍ତ କରାଯାଇଥିଲା?

- A) ଇନ୍ଦିରା ଗାନ୍ଧୀ ଜାତୀୟ ମୁକ୍ତ ବିଶ୍ୱବିଦ୍ୟାଳୟ (IGNOU)
- B) ବନାରସ ହିନ୍ଦୁ ବିଶ୍ୱବିଦ୍ୟାଳୟ (BHU)
- C) ଜବାହରଲାଲ ନେହେରୁ ବିଶ୍ୱବିଦ୍ୟାଳୟ (JNU)
- D) ଇଣ୍ଡିଆନ୍ ଇନଷ୍ଟିଚ୍ୟୁଟ୍ ଅଫ୍ ସାଇନ୍ସ (IISc)

11) In January 2022, the Government of Odisha has signed an agreement with which of the following organisations to improve the food security of small and marginal farmers in India by strengthening their resilience to climate change?

- A) UN World Food Programme (WFP)
- B) Food and Agriculture Organization (FAO)
- C) International Fund for Agricultural Development (IFAD)
- D) United Nations Environment Programme (UNEP)

11) ଜାନୁଆରୀ 2022 ରେ, ଓଡ଼ିଶା ସରକାର ଜଳବାୟୁ ପରିବର୍ତ୍ତନ ପ୍ରତି ତାଙ୍କର ସ୍ଥିରତାକୁ ସୁଦୃଢ଼ କରି ଭାରତରେ କ୍ଷୁଦ୍ର ଏବଂ ନାମମାତ୍ର କୃଷକଙ୍କ ଖାଦ୍ୟ ସୁରକ୍ଷାରେ ଉନ୍ନତି ଆଣିବା ପାଇଁ ନିମ୍ନଲିଖିତ ମଧ୍ୟରୁ କେଉଁ ସଂଗଠନ ସହିତ ଏକ ଚୁକ୍ତିନାମା ସ୍ୱାକ୍ଷର କରିଛନ୍ତି?

- A) ଜାତିସଂଘ ବିଶ୍ୱ ଖାଦ୍ୟ କାର୍ଯ୍ୟକ୍ରମ (WFP)
- B) ଖାଦ୍ୟ ଏବଂ କୃଷି ସଂଗଠନ (FAO)
- C) କୃଷି ବିକାଶ ପାଇଁ ଆନ୍ତର୍ଜାତୀୟ ପାଣ୍ଠି (IFAD)
- D) ମିଳିତ ଜାତିସଂଘର ପରିବେଶ କାର୍ଯ୍ୟକ୍ରମ (UNEP)

12) How many nations in the year 2000 promised to free people from extreme poverty and multiple deprivations through the eight Millennium Development Goals?

- A) 189
- B) 117
- C) 108
- D) 165

12) 2000 ମସିହାରେ କେତୋଟି ରାଷ୍ଟ୍ର ଆଠ ମିଲେନିୟମ ବିକାଶ ଲକ୍ଷ୍ୟ ମାଧ୍ୟମରେ ଲୋକଙ୍କୁ ଅତ୍ୟଧିକ ଦାରିଦ୍ର୍ୟ ଏବଂ ଏକାଧିକ ବଞ୍ଚିତତାରୁ ମୁକ୍ତ କରିବାକୁ ପ୍ରତିଶ୍ରୁତି ଦେଇଥିଲେ?

- A) 189
- B) 117
- C) 108
- D) 165

13) What is the colour of the skin of Polar bears?

- A) Black
- B) White
- C) Yellow
- D) Blue

13) ପୁରୀର ଭାଲୁର ଚର୍ମ ରଙ୍ଗ କ'ଣ?

- A) କଳା
- B) ଧଳା
- C) ହଳଦିଆ
- D) ନୀଳ

14) The First Round Table Conference in the year 1930 was held at

- A) Madras
- B) Calcutta
- C) London
- D) South Africa

14) 1930 ମସିହାରେ ପ୍ରଥମ ଗୋଲ୍ ଟେବୁଲ୍ ସମ୍ମିଳନୀ କେଉଁଠାରେ ଅନୁଷ୍ଠିତ ହୋଇଥିଲା?

- A) ମାଡ୍ରାସ
- B) କଲିକତା
- C) ଲଣ୍ଡନ
- D) ଦକ୍ଷିଣ ଆଫ୍ରିକା

15) Forest Research Institute, a premier forest institution, is based in which of the following city in India?

- A) Shimla
- B) Dehradun
- C) Bhopal
- D) Mysore

15) ବନ ଅନୁସନ୍ଧାନ ସଂସ୍ଥାନ, ଏକ ଜଙ୍ଗଲ ଅନୁସନ୍ଧାନ, ଭାରତର ନିମ୍ନ ସହର ମଧ୍ୟରୁ କେଉଁଠାରେ ଅବସ୍ଥିତ?

- A) ଶିମଲା
- B) ଡେରାଡୁନ୍
- C) ଭୋପାଳ
- D) ମହିଶୂର



Section 2 - Paper I Reasoning Ability

No. of Questions: 10

16) A is twice as fast as B in doing a job that can be completed in 24 days by A and B together. In how many days can B alone complete the job?

- A) 24 days
- B) 36 days
- C) 72 days
- D) 96 days

16) ଗୋଟିଏ କାର୍ଯ୍ୟକୁ B ତୁଳନାରେ A ଦୁଇଗୁଣ ଶୀଘ୍ର କରିଥାନ୍ତି, ଯାହାକି ଯଦି A ଏବଂ B ମିଳିତ ଭାବରେ କାର୍ଯ୍ୟ କରନ୍ତି 24 ଦିନରେ ଶେଷ ହୋଇପାରିବ। ତେବେ B ଏକାକୀ ଏହି କାର୍ଯ୍ୟକୁ କେତେ ଦିନରେ ଶେଷ କରିପାରିବେ?

- A) 24 ଦିନ
- B) 36 ଦିନ
- C) 72 ଦିନ
- D) 96 ଦିନ

17) Following are the conditions for selecting Personnel Officer in an organization:

The candidate must:

- i) be a graduate with at least 55% marks.
- ii) be a post graduate degree/diploma holder in Management with Personnel/HRD specialization with at least 60% marks.
- iii) have secured at least 60% marks in the selection process.
- iv) be at least 25 years and not more than 30 years old as on 1/6/2007.

In the case of a candidate who satisfies all the above conditions

EXCEPT-

- A) (iii), but has secured at least 65% in post graduate degree/diploma, the case is referred to DGM - Personnel.
- B) (ii), but has been working for at least three years in personnel department of an organization, the case is to be referred to GM - Personnel.

In each question below, details of one candidate is given. You have to take one of the following courses of actions for each candidate based on the information provided and the conditions and sub-conditions given above and mark the number of that course of action as your answer. You are not to assume anything other than the information provided in each question. All these cases are given to you as on 1/7/2007.

Mark answer (1) If the data provided is not adequate to take a decision.

Mark answer (2) If the candidate is not to be selected.

Mark answer (3) If the case is to be referred to DGM-Personnel.

Mark answer (4) If the case is to be referred to GM-Personnel.

Raman Das has secured 62% marks in graduation and 58% marks in the selection process. He was born on 8th October 1978. He has also secured 68% marks in post graduate diploma in Management with Personnel specialization.

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

17) ନିମ୍ନରେ ଦିଆଯାଇଥିବା ସର୍ତ୍ତ ଅନୁଯାୟୀ ଗୋଟିଏ ଅନୁଷ୍ଠାନର ଆସିଷ୍ଟାଣ୍ଟ ପର୍ସୋନେଲ ଅଫିସରଙ୍କୁ ଚୟନ କରାଯିବ :

ପ୍ରାର୍ଥୀ ହୋଇଥିବା ଆବଶ୍ୟକ :

- i) ଅତି କମ୍ରେ 55% ନମ୍ବର ରଖିଥିବା ଜଣେ ଗ୍ରାଜୁଏଟ୍ ହୋଇଥିବେ।
- ii) ଅତି କମ୍ରେ 60% ନମ୍ବର ସହିତ ପର୍ସୋନେଲ୍ /ଏଡମିନିଷ୍ଟ୍ରିଭିଭ୍ ସେସିଆଲାଇଜେସନ୍ ସହ ମ୍ୟାନେଜମେଣ୍ଟରେ ପୋଷ୍ଟ ଗ୍ରାଜୁଏଟ୍ ଡିଗ୍ରୀ/ ଡିପ୍ଲୋମାଧାରୀ ହୋଇଥିବେ।
- iii) ସେ ବଛାବଛି ପ୍ରକ୍ରିୟାରେ ଅତିକମ୍ରେ 60% ନମ୍ବର ରଖିଥିବା ଆବଶ୍ୟକ।
- iv) 1/6/2007 ସୁଦ୍ଧା ବୟସ ଅତି କମ୍ରେ 25 ବର୍ଷ ଏବଂ 30 ବର୍ଷରୁ ଅଧିକ ହୋଇନଥିବ।

ଅବଶ୍ୟକ, ଜଣେ ପ୍ରାର୍ଥୀ ଉପରୋକ୍ତ ସମସ୍ତ ସର୍ତ୍ତ ପୂରଣ କରୁଥାନ୍ତି -

- A) ଉପରୋକ୍ତ (iii) ବ୍ୟତୀତ, କିନ୍ତୁ ସେ ଡିଗ୍ରୀ/ଡିପ୍ଲୋମାରେ ଅତିକମ୍ରେ 65% ନମ୍ବର ରଖିଛନ୍ତି, ତାଙ୍କ ଘଟଣାକୁ ଡିଜିଏମ୍- ପର୍ସୋନେଲଙ୍କ ନିକଟକୁ ପଠାଯିବ।
- B) ଉପରୋକ୍ତ (ii) ବ୍ୟତୀତ, କିନ୍ତୁ ଅତିକମ୍ରେ ତିନି ବର୍ଷ ହେଲା ଏକ ଅନୁଷ୍ଠାନର ପର୍ସୋନେଲ୍ ବିଭାଗରେ କାର୍ଯ୍ୟ କରୁଛନ୍ତି, ଏହି ଘଟଣାକୁ ଜିଏମ୍- ପର୍ସୋନେଲଙ୍କୁ ପଠାଯିବ।

ନିମ୍ନରେ ଦିଆଯାଇଥିବା ପ୍ରତିଟି ପ୍ରଶ୍ନରେ ଜଣେ ପ୍ରାର୍ଥୀଙ୍କର ବିବରଣୀ ଦିଆଯାଇଛି। ଆପଣଙ୍କୁ ପ୍ରତିଟି ପ୍ରାର୍ଥୀଙ୍କ ପାଇଁ ଦିଆଯାଇଥିବା ସୂଚନା ଏବଂ ସର୍ତ୍ତ ଓ ଉପରେ ଦିଆଯାଇଥିବା ଉପସର୍ତ୍ତ ଆଧାରରେ ନିମ୍ନଲିଖିତ ମଧ୍ୟରୁ ଗୋଟିଏ କାର୍ଯ୍ୟାନୁଷ୍ଠାନ ଗ୍ରହଣ କରିବାକୁ ହେବ ଏବଂ ଆପଣ ଉତ୍ତର ଭାବରେ ବାଛୁଥିବା କାର୍ଯ୍ୟାନୁଷ୍ଠାନର ସଂଖ୍ୟାକୁ ଚିହ୍ନିତ କରନ୍ତୁ। ଆପଣଙ୍କୁ ପ୍ରତିଟି ପ୍ରଶ୍ନରେ ଦିଆଯାଇଥିବା ସୂଚନା ବ୍ୟତୀତ ଅନ୍ୟ କୌଣସି ବିଷୟ ଧରି ନେବାକୁ କିମ୍ବା ଅନୁମାନ ଲଗାଇବାକୁ ହେବ ନାହିଁ ଏ ସମସ୍ତ ଘଟଣା ଆପଣଙ୍କୁ 1/7/2007 ଅନୁଯାୟୀ ଦିଆଯାଇଛି।

ଯଦି ନିଷ୍ପତ୍ତି ନେବା ପାଇଁ ଦିଆଯାଇଥିବା ତଥ୍ୟ ଯଥେଷ୍ଟ ନୁହେଁ ଉତ୍ତରକୁ (1) ଭାବରେ ଚିହ୍ନିତ କରନ୍ତୁ।

ଯଦି ଏହି ପ୍ରାର୍ଥୀ ବଛାଯିବ ନାହିଁ ତେବେ ଉତ୍ତର (2) ଚିହ୍ନିତ କରନ୍ତୁ।

ଯଦି ଏହି ଘଟଣାକୁ ଡିଜିଏମ୍-ପର୍ସୋନେଲଙ୍କ ପାଖକୁ ପଠାଯିବ ଉତ୍ତରକୁ (3) ଭାବରେ ଚିହ୍ନିତ କରନ୍ତୁ।

ଯଦି ଏହି ଘଟଣାକୁ ଜିଏମ୍-ପର୍ସୋନେଲଙ୍କ ପାଖକୁ ପଠାଯିବ ଉତ୍ତରକୁ (4) ଭାବରେ ଚିହ୍ନିତ କରନ୍ତୁ।

ରମଣ ଦାସ ସ୍ନାତକ ପରୀକ୍ଷାରେ 62% ନମ୍ବର ଓ ବଛା ବଛି ପ୍ରକ୍ରିୟାରେ 58% ନମ୍ବର ରଖିଛନ୍ତି। ସେ 1978 ମସିହା ଅକ୍ଟୋବର ମାସ 8 ତାରିଖରେ ଜନ୍ମଗ୍ରହଣ କରିଥିଲେ। ସେ ପର୍ସୋନେଲ୍ ସେସିଆଲାଇଜେସନ୍ ସହିତ ମ୍ୟାନେଜମେଣ୍ଟରେ ପୋଷ୍ଟ ଗ୍ରାଜୁଏଟ୍ ଡିପ୍ଲୋମାରେ 68% ନମ୍ବର ମଧ୍ୟ ରଖିଛନ୍ତି।

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

D) 4

18) Find the next term in the following series:

14, 23, 18, 21, 22, 19, 26,

A) 24

B) 29

C) 18

D) 17

18) ନିମ୍ନଲିଖିତ ସିରିଜ୍ ର ପରବର୍ତ୍ତୀ ପଦ ନିର୍ଣ୍ଣୟ କରନ୍ତୁ :

14, 23, 18, 21, 22, 19, 26,

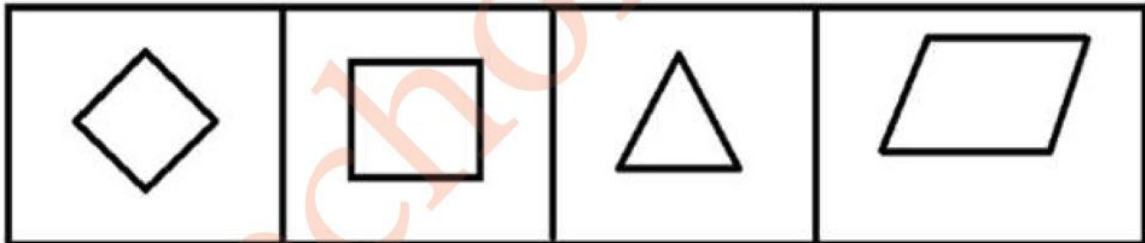
A) 24

B) 29

C) 18

D) 17

19) In the question below, four patterns/figures have been given of which three are alike in the same logical way and one is different. Choose the odd one out.



A

B

C

D

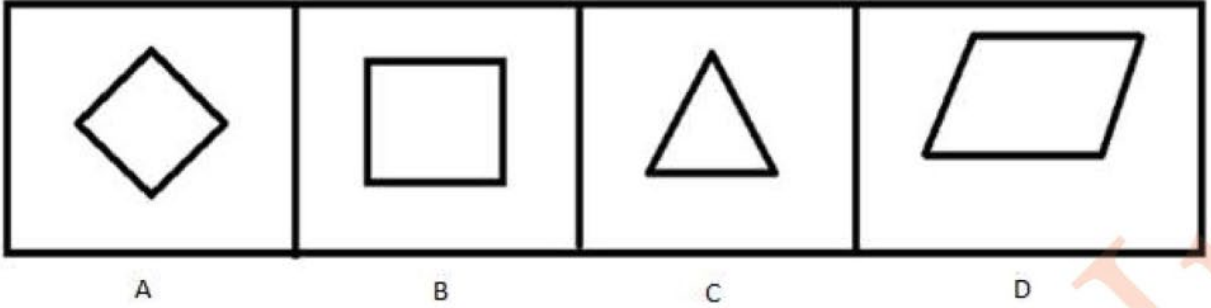
A) A

B) B

C) C

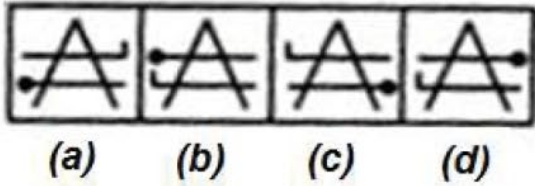
D) D

19) ନିମ୍ନରେ ଦିଆଯାଇଥିବା ପ୍ରଶ୍ନରେ, ଚାରୋଟି ପ୍ୟାଟର୍ଣ୍ଣ ବା ଶୈଳୀ/ଚିତ୍ର ଦିଆଯାଇଛି, ସେଗୁଡ଼ିକ ମଧ୍ୟରୁ ତିନୋଟି ମଧ୍ୟରେ ସମାନ ଡର୍କ ଅନୁଯାୟୀ ସାଦୃଶ୍ୟତା ଏବଂ ଆଉ ଗୋଟିଏ ଭିନ୍ନ ରହିଛି। ଭିନ୍ନଟିକୁ ବାଛନ୍ତୁ।



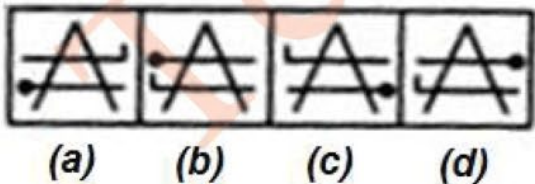
- A) A
- B) B
- C) C
- D) D

20) Which is the odd one out among the four?



- A) a
- B) b
- C) c
- D) d

20) ଏହି ଚାରୋଟି ମଧ୍ୟରୁ କେଉଁଟି ଭିନ୍ନ ଅଟେ?



- A) a
- B) b
- C) c
- D) d

21) In a locality 18 pumps can deliver 2,170 liters of water in 70 minutes. How much time would be required by 16 pumps to deliver 1,736 liters of water in the same locality?

- A) 63 minutes
- B) 56 minutes
- C) 49 minutes
- D) 42 minutes

21) ଗୋଟିଏ ସ୍ଥାନରେ 18ଟି ପମ୍ପ 70 ମିନିଟ୍ରେ 2,170 ଲିଟର ପାଣି ଉଠାଇପାରନ୍ତି। ସମାନ ସ୍ଥାନରେ 1,736 ଲିଟର ପାଣି ଉଠାଇବା ପାଇଁ 16ଟି ପମ୍ପ କେତେ ସମୟ ଆବଶ୍ୟକ କରିବ?

- A) 63 ମିନିଟ୍
- B) 56 ମିନିଟ୍
- C) 49 ମିନିଟ୍
- D) 42 ମିନିଟ୍

22) 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 amount should be paid to R?

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

22) 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 କାର୍ଯ୍ୟ ଶେଷ କରିଦିଅନ୍ତି। Rକୁ କେତେ ଟଙ୍କା ପୈଠି କରାଯିବା ଉଚିତ୍?

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

23) Study the following information carefully and answer the question given below:

Following are the conditions for admitting students for graduate course in Architecture in a college:

The students must:

- be at least 17 years old as on 1/7/2006.
 - have secured at least 50% overall marks in XII Std. final examination.
 - have secured at least 60% aggregate marks in Physics, Chemistry and Mathematics in XII Std. final examination.
 - have secured at least 55% marks in the entrance examination.
 - Pay ₹ 60,000/- annual fee at the time of admission.
- If students satisfy all the above conditions except.....

- (iii), but has secured at least 70% overall marks in XII Std. final examination, his/her case is to be referred to Principal of the college.
- (v), but can pay at least 60% of the annual fee at the time of admission and the remaining amount within six months, his / her case is to be referred to Vice Principal of the college.

In each of the questions given below, detailed information about one student is given. You have to take one of the following courses of actions based on the information provided and the above conditions and sub-conditions. You are not to assume anything other than the information provided in each question. All these cases are given to you as on 1/7/2006.

Mark Answer (1) If the data provided are not adequate to take a decision.

Mark Answer (2) If the case is to be referred to the Principal.

Mark Answer (3) If the student is not to be admitted.

Mark Answer (4) If the case is to be referred to the Vice Principal.

Sudha Ghosal was born on 8th August 1989. She can pay ₹ 60,000/- at the time of admission. She has secured 65% overall marks in XII Std. final examination and 55% marks in Physics, Chemistry and Mathematics, She has also secured 75% marks in the entrance test.

- 1
- 2
- 3
- 4

23) ତଳେ ଦିଆଯାଇଥିବା ତଥ୍ୟକୁ ଯତ୍ନପୂର୍ବକ ପଢ଼ନ୍ତୁ ଏବଂ ନିମ୍ନରେ ଦିଆଯାଇଥିବା ପ୍ରଶ୍ନର ଉତ୍ତର ଦିଅନ୍ତୁ :

ନିମ୍ନରେ ଏକ ମହାବିଦ୍ୟାଳୟରେ ଆର୍କିଟେକଚରରେ ସ୍ନାତକ ପାଠ୍ୟକ୍ରମରେ ଛାତ୍ରଛାତ୍ରୀଙ୍କ ନାମ ଲେଖାଯାଇ ପାଇଁ ସର୍ତ୍ତାବଳି ଦର୍ଶାଯାଇଛି :

ଏହି ଛାତ୍ରଛାତ୍ରୀ ହୋଇଥିବା ଆବଶ୍ୟକ :

- 1/7/2006 ସୁଦ୍ଧା ଅତିକମରେ 17 ବର୍ଷ ବୟସର ହୋଇଥିବେ।
- ସେ XII Std ର ଶେଷ ପରୀକ୍ଷାରେ ଅତିକମରେ 50% ସାମଗ୍ରୀକ ଭାବରେ ମାର୍କ ରଖିଥିବେ।
- ସେ XII Std ର ଶେଷ ପରୀକ୍ଷାରେ ପଦାର୍ଥ ବିଜ୍ଞାନ, ରସାୟନ ବିଜ୍ଞାନ ଏବଂ ଅଙ୍କରେ ଅତି କମରେ 60% ଏଗ୍ରିଗେଟ୍ ମାର୍କ ରଖିଥିବେ।
- ସେ ପ୍ରବେଶିକା ପରୀକ୍ଷାରେ ଅତି କମରେ 55% ମାର୍କ ରଖିଥିବେ।
- ନାମଲେଖା ସମୟରେ ₹ 60,000/- ବାର୍ଷିକ ଦେୟ ପୈଠ କରିବେ।

ଯଦି ଛାତ୍ରଛାତ୍ରୀମାନେ ଉପରୋକ୍ତ ସମସ୍ତ ସର୍ତ୍ତାବଳି ପୂରଣ କରନ୍ତି.....

a) ଉପରୋକ୍ତ (iii) ବ୍ୟତୀତ, ସେ XII Std ର ଶେଷ ପରୀକ୍ଷାରେ ସାମଗ୍ରୀକ ଭାବରେ 70% ମାର୍କ ରଖିଛନ୍ତି, ତାଙ୍କ ଘଟଣାକୁ ମହାବିଦ୍ୟାଳୟର ଅଧ୍ୟକ୍ଷଙ୍କ ନିକଟକୁ ପଠାଯିବ।

b) ଉପରୋକ୍ତ (v) ବ୍ୟତୀତ, ନାମ ଲେଖା ସମୟରେ ବାର୍ଷିକ ଦେୟର ଅତିକମ୍ରେ 60% ପୈଠ କରିପାରିବେ ଏବଂ ଅବଶିଷ୍ଟ ପରିମାଣ 6 ମାସ ମଧ୍ୟରେ ପୈଠ କରିପାରିବେ, ତାଙ୍କ ଘଟଣାକୁ ମହାବିଦ୍ୟାଳୟର ଉପଅଧ୍ୟକ୍ଷଙ୍କ ନିକଟକୁ ପଠାଯିବ।

ନିମ୍ନରେ ଦିଆଯାଇଥିବା ପ୍ରତିଟି ପ୍ରଶ୍ନରେ ଜଣେ ଛାତ୍ରଙ୍କର ପୂର୍ଣ୍ଣାନ୍ତୁପୂର୍ଣ୍ଣ ସୂଚନା ଦିଆଯାଇଛି। ଆପଣଙ୍କୁ ଦିଆଯାଇଥିବା ସୂଚନା ଓ ଉପରୋକ୍ତ ସର୍ତ୍ତାବଳି ତଥା ଉପସର୍ତ୍ତାବଳି ଅନୁଯାୟୀ ନିମ୍ନଲିଖିତ ମଧ୍ୟରୁ ଗୋଟିଏ କାର୍ଯ୍ୟାନୁଷ୍ଠାନ ଗ୍ରହଣ କରିବାକୁ ହେବ। ଆପଣଙ୍କୁ ପ୍ରତିଟି ପ୍ରଶ୍ନରେ ଦିଆଯାଇଥିବା ସୂଚନା ବ୍ୟତୀତ ଅନ୍ୟ କୌଣସି ବିଷୟ ଧରି ନେବାକୁ କିମ୍ବା ଅନୁମାନ ଲଗାଇବାକୁ ହେବ ନାହିଁ। ଏ ସମସ୍ତ ଘଟଣା ଆପଣଙ୍କୁ 1/7/2006 ଅନୁଯାୟୀ ଦିଆଯାଇଛି।

ଯଦି ନିଷ୍ପତ୍ତି ନେବା ପାଇଁ ଦିଆଯାଇଥିବା ତଥ୍ୟ ଯଥେଷ୍ଟ ନୁହେଁ ଉତ୍ତରକୁ (1) ଭାବରେ ଚିହ୍ନିତ କରନ୍ତୁ।

ଯଦି ଏହି ଘଟଣାକୁ ଅଧ୍ୟକ୍ଷଙ୍କ ପାଖକୁ ପଠାଯିବ ଉତ୍ତରକୁ (2) ଭାବରେ ଚିହ୍ନିତ କରନ୍ତୁ।

ଯଦି ଛାତ୍ର ଦାଖଲ ହେବେ ନାହିଁ ତେବେ ଉତ୍ତର (3) ଚିହ୍ନିତ କରନ୍ତୁ।

ଯଦି ଏହି ଘଟଣାକୁ ଉପଅଧ୍ୟକ୍ଷଙ୍କ ପାଖକୁ ପଠାଯିବ ଉତ୍ତରକୁ (4) ଭାବରେ ଚିହ୍ନିତ କରନ୍ତୁ।

ସୁଧା ଘୋଷାଲ ଅଗଷ୍ଟ ମାସ 8 ତାରିଖ 1989 ମସିହାରେ ଜନ୍ମଗ୍ରହଣ କରିଥିଲେ। ନାମଲେଖା ସମୟରେ ସେ ₹ 60,000/- ପୈଠ କରିପାରିବେ। ସେ XII Std ର ଶେଷ ପରୀକ୍ଷାରେ ସାମଗ୍ରୀକ ଭାବରେ 65% ମାର୍କ ରଖିଥିଲେ ଏବଂ ପଦାର୍ଥ ବିଜ୍ଞାନ, ରସାୟନ ବିଜ୍ଞାନ ଓ ଅଙ୍କରେ 55% ମାର୍କ ରଖିଛନ୍ତି ଏବଂ ସେ ପ୍ରବେଶିକା ପରୀକ୍ଷାରେ 75% ମାର୍କ ରଖିଛନ୍ତି।

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

24) Complete the series:

6, 20, ? 200, 606, 1820

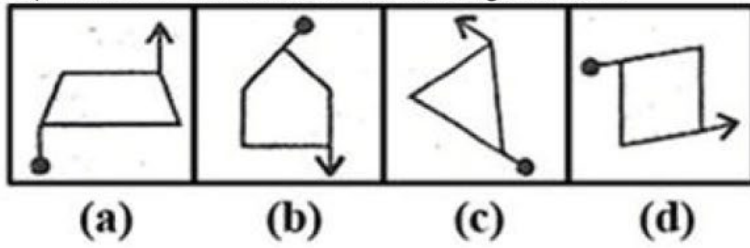
- A) 20
- B) 10
- C) 66
- D) 50

24) ନିମ୍ନଲିଖିତ ସିରିଜ୍ କୁ ସମ୍ପୂର୍ଣ୍ଣ କରନ୍ତୁ :

6, 20, ?, 200, 606, 1820

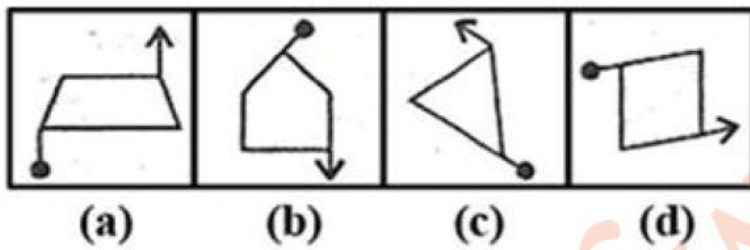
- A) 20
- B) 10
- C) 66
- D) 50

25) Which is the odd one out among the four?



- A) a
- B) b
- C) c
- D) d

25) ଏହି ଚାରୋଟି ମଧ୍ୟରୁ କେଉଁଟି ଭିନ୍ନ?



- A) a
- B) b
- C) c
- D) d

Section 3 - Paper I Computer Literacy

No. of Questions: 10

26) What is the smallest font size available in MS WORD?

- A) 1
- B) 8
- C) 10
- D) 14

26) MS WORD ରେ ସବୁଠାରୁ ଛୋଟ ଉପଲବ୍ଧ ଫଣ୍ଟ ଆକାର କଣ?

- A) 1
- B) 8
- C) 10
- D) 14

27) Which is not an input device?

- A) Keyboard
- B) Mouse
- C) Speaker
- D) Scanner

27) କେଉଁଟି ଏକ ଇନପୁଟ୍ ଡିଭାଇସ୍ ନୁହେଁ?

- A) କୀ ବୋର୍ଡ୍
- B) ମାଉସ୍
- C) ସ୍ପିକର୍
- D) ସ୍କାନର୍

28) What do you mean by a program or software in which the source code is available to the general public for use and/or modification from its original design free of charge?

- A) Open source
- B) Licenced software
- C) Agreement
- D) Private software



28) ଆପଣ ଏକ ପ୍ରୋଗ୍ରାମ୍ କିମ୍ବା ସଫ୍ଟୱେୟାର୍ କହିଲେ କଣ ବୁଝନ୍ତି, ଯେଉଁଥିରେ ସୋର୍ସ କୋଡ୍ ସାଧାରଣ ଜନତାଙ୍କ ପାଇଁ ଏହାର ମୂଳ ଡିଜାଇନ୍ ରୁ ମାଗଣାରେ ବ୍ୟବହାର ଏବଂ/କିମ୍ବା ପରିବର୍ତ୍ତନ ପାଇଁ ଉପଲବ୍ଧ?

- A) ଓପନ ସୋର୍ସ
- B) ଲାଇସେନ୍ସ୍ ସଫ୍ଟୱେୟାର୍
- C) ଏଗ୍ରୀମେଣ୍ଟ୍
- D) ବ୍ୟକ୍ତିଗତ ସଫ୍ଟୱେୟାର୍

29) Which software below is an email client?

- A) Microsoft Internet Explorer
- B) Windows 98
- C) Microsoft Power Point
- D) Microsoft Outlook

29) ନିମ୍ନରେ କେଉଁ ସଫ୍ଟୱେୟାର୍ ଏକ ଇମେଲ୍ କ୍ଲାଏଣ୍ଟ୍ ଅଟେ?

- A) Microsoft Internet Explorer
- B) Windows 98
- C) Microsoft Power Point
- D) Microsoft Outlook

30) Which among the following is not owned by Facebook?

- A) Instagram
- B) Messenger
- C) Duo
- D) Whatsapp

30) ନିମ୍ନଲିଖିତ ମଧ୍ୟରୁ କେଉଁଟି Facebook ର ମାଲିକାନାରେ ନାହିଁ?

- A) Instagram
- B) Messenger
- C) Duo

D) Whatsapp

31) Where can you see the name of a PowerPoint file, while working on it?

- A) Title bar
 - B) Menu bar
 - C) Slides tab
 - D) Status bar
-

31) ଏକ PowerPoint ଫାଇଲ ରେ କାମ କରିବା ସମୟରେ ଆପଣ ଏହି ଫାଇଲର ନାମ କେଉଁଠାରେ ଦେଖିପାରିବେ?

- A) Title bar
 - B) Menu bar
 - C) Slides tab
 - D) Status bar
-

32) Which one of the following UNIT controls the overall operation of the computer?

- A) CU
 - B) ALU
 - C) Register
 - D) Instruction
-

32) ନିମ୍ନଲିଖିତ ମଧ୍ୟରୁ କେଉଁ ୟୁନିଟ୍ କମ୍ପ୍ୟୁଟରର ସାମଗ୍ରିକ କାର୍ଯ୍ୟକୁ ନିୟନ୍ତ୍ରଣ କରେ?

- A) CU
 - B) ALU
 - C) Register
 - D) Instruction
-

33) A hardware device that stores data and programs, executes program instructions, and performs arithmetic/logic operations is known as the:

- A) CPU (central processing unit)
- B) Integrated circuits
- C) Main storage
- D) Memory

33) ଏକ ହାର୍ଡ଼ୱେୟାର୍ ଡିଭାଇସ୍ ଯାହା ତାଟା ଏବଂ ପ୍ରୋଗ୍ରାମ୍ ସ୍ମୋର୍ କରେ, ପ୍ରୋଗ୍ରାମ୍ ନିର୍ଦ୍ଦେଶାବଳୀ କାର୍ଯ୍ୟକାରୀ କରେ, ଏବଂ ଗଣିତ/ତର୍କ ସଞ୍ଚାଳନ କରେ ତାହା ଏହି ଭାବରେ ଜଣାଶୁଣା:

- A) CPU (central processing unit)
- B) Integrated circuits
- C) Main storage
- D) Memory

34) Which among the following provides e-certificates like resident certificate, birth certificate, cast certificate etc. in Odisha?

- A) edistrict.odisha.gov.in
- B) ecertificates.odisha.gov.in
- C) revenue.odisha.gov.in
- D) online.odisha.gov.in

34) ନିମ୍ନଲିଖିତ ମଧ୍ୟରୁ କେଉଁଟି ଓଡ଼ିଶାରେ ବାସିନ୍ଦା ପ୍ରମାଣପତ୍ର, ଜନ୍ମ ପ୍ରମାଣପତ୍ର, ଜାତିଗତ ପ୍ରମାଣପତ୍ର ଇତ୍ୟାଦି ଇ-ସାର୍ଟିଫିକେଟ୍ ପ୍ରଦାନ କରେ?

- A) edistrict.odisha.gov.in
- B) ecertificates.odisha.gov.in
- C) revenue.odisha.gov.in
- D) online.odisha.gov.in

35) Which shortcut key is used to increase the font size in the browser?

- A) Ctrl >
- B) Ctrl +
- C) Ctrl o
- D) Ctrl l

35) ବ୍ରାଉଜର୍ ରେ ଫଣ୍ଟ ଆକାର ବୃଦ୍ଧି କରିବାକୁ କେଉଁ ସର୍କର୍ କୀ ବ୍ୟବହୃତ ହୁଏ?

- A) Ctrl >
- B) Ctrl +
- C) Ctrl o
- D) Ctrl l



Section 4 - Paper I Pedagogy and Evaluation

No. of Questions: 15

36) The instructional method in which groups of learners work together to complete learning assignments is known as

- A) segregated learning
- B) individual learning
- C) cooperative learning
- D) community learning

36) ଅନୁଦେଶିକ ପଦ୍ଧତି ଯେଉଁଥିରେ ଶିକ୍ଷାର୍ଥୀମାନଙ୍କର ଗୋଷ୍ଠୀ ଶିକ୍ଷଣର ନ୍ୟସ୍ତ କାର୍ଯ୍ୟ ସମାପ୍ତ କରିବା ପାଇଁ ଏକତ୍ର କାର୍ଯ୍ୟ କରନ୍ତି, ଏହାକୁ କ'ଣ କୁହାଯାଏ?

- A) ପୃଥକ ଶିକ୍ଷଣ
- B) ବ୍ୟକ୍ତିଗତ ଶିକ୍ଷଣ
- C) ସହଯୋଗୀ ଶିକ୍ଷଣ
- D) ସମ୍ପ୍ରଦାୟ ଶିକ୍ଷଣ

37) Which of the following is NOT a group activity that a teacher can conduct in a class?

- A) Role play
- B) Jigsaw puzzle
- C) Discussion
- D) Reading a library book

37) ନିମ୍ନଲିଖିତ ମଧ୍ୟରୁ କେଉଁଟି ଏକ ଗୋଷ୍ଠୀ କାର୍ଯ୍ୟକଳାପ ନୁହେଁ, ଯାହା ଜଣେ ଶିକ୍ଷକ ଏକ ଶ୍ରେଣୀରେ ପରିଚାଳନା କରିପାରନ୍ତି?

- A) ଭୂମିକା ଅଭିନୟ
- B) ଜିଗସା ପଜଲ୍
- C) ଆଲୋଚନା
- D) ଏକ ଲାଇବ୍ରେରୀ ପୁସ୍ତକ ପଢ଼ିବା

38) Exams like Olympiad which are commercially prepared and have uniform procedures of administration and scoring are known as

- A) State test
- B) Board test
- C) Program test

D) Standardised test

38) ଅଲମ୍ପିଆଡ଼ ପରି ପରୀକ୍ଷା ଯାହା ବ୍ୟବସାୟିକ ଭାବରେ ପ୍ରସ୍ତୁତ ଏବଂ ପ୍ରଶାସନ ଏବଂ ସ୍କୋରିଂର ସମାନ ପ୍ରକ୍ରିୟା ଥାଏ, ତାହାକୁ କ'ଣ କୁହାଯାଏ?

- A) ରାଜ୍ୟ ପରୀକ୍ଷା
- B) ବୋର୍ଡ ପରୀକ୍ଷା
- C) ପ୍ରୋଗ୍ରାମ ପରୀକ୍ଷା
- D) ମାନକ ପରୀକ୍ଷା

39) Full form of AFL is

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

39) AFL ର ପୂର୍ଣ୍ଣରୂପ ହେଉଛି -

- A) ଆସେସମେଣ୍ଟ ଫର ଲର୍ନିଙ୍ଗ
- B) ଆସେସମେଣ୍ଟ ଆଜ୍ ଲର୍ନିଙ୍ଗ
- C) ଆସେସମେଣ୍ଟ ଅଫ୍ ଲର୍ନିଙ୍ଗ
- D) ଆସେସମେଣ୍ଟ ଅଫ୍ ଲର୍ନିଙ୍ଗ

40) Maturation determines the readiness of the child for

- A) Ageing
- B) Reading
- C) Learning
- D) Developing

40) ପରିପକ୍ୱତା ଶିଶୁର କେଉଁ ପ୍ରସ୍ତୁତତାକୁ ନିର୍ଦ୍ଧାରଣ କରେ?

- A) ବାର୍ଦ୍ଧକ୍ୟ
- B) ପଠନ
- C) ଶିକ୍ଷଣ
- D) ବିକାଶଶୀଳ

41) In which type of evaluation does the teacher evaluate the learner at the beginning of the teaching-learning process?

- A) Portfolio
- B) Summative
- C) Formative
- D) Diagnostic

41) ଶିକ୍ଷାଦାନ-ଶିକ୍ଷଣ ପ୍ରକ୍ରିୟା ଆରମ୍ଭରେ ଶିକ୍ଷକ କେଉଁ ପ୍ରକାରର ମୂଲ୍ୟାୟନରେ ଶିକ୍ଷାର୍ଥୀଙ୍କୁ ମୂଲ୍ୟାଙ୍କନ କରନ୍ତି?

- A) ପୋର୍ଟଫୋଲିଓ
- B) ସମାପ୍ତି ସୂଚକ
- C) ଗଠନମୂଳକ
- D) ନୈଦାନିକ

42) Teaching facilitates

- A) ignorance
- B) learning
- C) prejudice
- D) avoidance

42) ଶିକ୍ଷାଦାନ କାହାକୁ ସୁଗମ କରାଏ?

- A) ଅଜ୍ଞତା
- B) ଶିକ୍ଷଣ
- C) ପୂର୍ବାଗ୍ରହ
- D) ପରିହାର

43) Zone of Proximal Development is associated with

- A) Lev Vygotsky
- B) B F Skinner
- C) Ivan Pavlov
- D) John Dewey

43) ନିକଟବର୍ତ୍ତୀ ବିକାଶର କ୍ଷେତ୍ର (ଯୋଗ୍ୟ ଅଫ୍ ପ୍ରୋକ୍ସିମାଲ୍ ଡେଭଲପମେଣ୍ଟ) କାହା ସହିତ ଜଡ଼ିତ ଅଟେ?

- A) ଲେଭ୍ ଭିଗୋଟସ୍କି
- B) ବି ଏଫ୍ ସ୍କିନର୍
- C) ଲଭାନ୍ ପାଲୋଲ୍
- D) ଜନ ତିଫ୍ଟି

44) All of the following are features of team teaching EXCEPT:

- A) It involves a group of teachers
- B) Teachers are jointly responsible
- C) All the teachers have same competencies
- D) It is co-operative form of teaching

44) କେଉଁ ଗୋଟିକୁ ଛାଡ଼ି ନିମ୍ନଲିଖିତ ସମସ୍ତ ଗୋଷ୍ଠୀଭିତ୍ତିକ ଶିକ୍ଷାଦାନର ବୈଶିଷ୍ଟ୍ୟ ଅଟନ୍ତି?

- A) ଏଥିରେ ଶିକ୍ଷକମାନଙ୍କର ଏକ ଗୋଷ୍ଠୀ ଅନ୍ତର୍ଭୁକ୍ତ ହୁଏ
- B) ଶିକ୍ଷକମାନେ ମିଳିତ ଭାବେ ଦାୟୀ ହୁଅନ୍ତି
- C) ସମସ୍ତ ଶିକ୍ଷକଙ୍କର ସମାନ ଦକ୍ଷତା ଥାଏ
- D) ଏହା ଶିକ୍ଷାଦାନର ସମବାୟ ରୂପ ଅଟେ

45) "A collection of students' work reflecting daily classroom curriculum and teaching is known as

- A) Evidence based assessment
- B) Test validation methodology
- C) Creative testing process
- D) Portfolio method

45) "ଦୈନିକ ଶ୍ରେଣୀଗୃହ ପାଠ୍ୟକ୍ରମ ଏବଂ ଶିକ୍ଷାଦାନକୁ ପ୍ରତିଫଳିତ କରୁଥିବା ଛାତ୍ରମାନଙ୍କ କାର୍ଯ୍ୟର ଏକ ସଂଗ୍ରହ", କ'ଣ ଭାବରେ ଜଣାଶୁଣା?

- A) ପ୍ରମାଣଭିତ୍ତିକ ନିର୍ଦ୍ଧାରଣ
- B) ପରୀକ୍ଷଣ ବୈଧତାକରଣ ପଦ୍ଧତି
- C) ସୃଜନଶୀଳ ପରୀକ୍ଷଣ ପ୍ରକ୍ରିୟା
- D) ପୋର୍ଟଫୋଲିଓ ପଦ୍ଧତି

46) Formative Assessment is

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

46) ଗଠନମୂଳକ ନିର୍ଦ୍ଧାରଣ ହେଉଛି-

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

47) Examine the Following Statements and identify the statements that are TRUE:

- I) Rogers's and Maslow's theories focus on individual choices and don't believe that biology is deterministic.
- II) The highest need is the need for self-actualization, which is the achievement of our fullest potential.

- A) Only I is true
- B) Only II is true
- C) Both I & II are true
- D) Neither I nor II is true

47) ନିମ୍ନଲିଖିତ ବିବୃତ୍ତିଗୁଡ଼ିକର ପରୀକ୍ଷା କରନ୍ତୁ ଏବଂ ବିବୃତ୍ତିଗୁଡ଼ିକ ମଧ୍ୟରୁ କେଉଁଟି ସତ୍ୟ ତାହା ଚିହ୍ନଟ କରନ୍ତୁ।

- I) ରୋଜର୍ସ ଏବଂ ମାସଲୋଙ୍କ ତତ୍ତ୍ୱ ବ୍ୟକ୍ତିଗତ ପସନ୍ଦ ଉପରେ ଧ୍ୟାନ ଦେଇଥାଏ ଏବଂ ବିଶ୍ୱାସ କରେ ନାହିଁ ଯେ ଜୀବବିଜ୍ଞାନ ନିର୍ଣ୍ଣୟକାରୀ ଅଟେ।
- II) ସର୍ବୋଚ୍ଚ ଆବଶ୍ୟକତା ହେଉଛି ଆତ୍ମ-ବାସ୍ତବୀକରଣର ଆବଶ୍ୟକତା, ଯାହା ଆମର ପୂର୍ଣ୍ଣ ସମ୍ଭାବନାର ସଫଳତା।

- A) କେବଳ I ସତ୍ୟ ଅଟେ
- B) କେବଳ II ସତ୍ୟ ଅଟେ
- C) I ଏବଂ II ଉଭୟ ସତ୍ୟ ଅଟେ
- D) I ଏବଂ II ମଧ୍ୟରୁ କୌଣସିଟି ସତ୍ୟ ନୁହେଁ

48) According to Carl Roger's theory of Humanistic approach, the self is divided into two categories. They are:

- A) The ideal self and the real self
- B) Maslow's self and Jefferson's self
- C) Individual self and group self
- D) Behaviorist self and psychoanalytic self

48) କାର୍ଲ ରୋଜରଙ୍କ ମାନବବାଦୀ ଆଭିମୁଖ୍ୟର ସିଦ୍ଧାନ୍ତ ଅନୁଯାୟୀ, ଆତ୍ମକୁ ଦୁଇଟି ବର୍ଗରେ ବିଭକ୍ତ କରାଯାଏ ସେଗୁଡ଼ିକ ହେଉଛି :

- A) ଆଦର୍ଶ ଆତ୍ମ ଏବଂ ବାସ୍ତବିକ ଆତ୍ମ
- B) ମାସଲୋଙ୍କ ଆତ୍ମ ଏବଂ ଜେଫରସନଙ୍କ ଆତ୍ମ
- C) ବ୍ୟକ୍ତିଗତ ଆତ୍ମ ଏବଂ ଗୋଷ୍ଠୀ ଆତ୍ମ
- D) ଆଚରଣବାଦୀ ଆତ୍ମ ଏବଂ ମନୋବିଶ୍ଳେଷଣାତ୍ମକ ଆତ୍ମ

49) The assessment conducted over a period of time with pre-defined standards is known as

- A) Summative Assessment
- B) Formative Assessment
- C) Normative Assessment
- D) Disruptive Assessment

49) ପୂର୍ବ ନିର୍ଦ୍ଧାରିତ ମାନକ ସହିତ ଏକ ସମୟ ମଧ୍ୟରେ କରାଯାଇଥିବା ନିର୍ଦ୍ଧାରଣଟି କ'ଣ ଭାବେ ଜଣାଶୁଣା?

- A) ସମାପ୍ତି ସୂଚକ ନିର୍ଦ୍ଧାରଣ
- B) ଗଠନମୂଳକ ନିର୍ଦ୍ଧାରଣ
- C) ଆଦର୍ଶ ନିର୍ଦ୍ଧାରଣ
- D) ବିଭ୍ରାନ୍ତିକର ନିର୍ଦ୍ଧାରଣ

50) The temporary support that parents or teachers give a child to do a task is

- A) Span of attention
- B) Zone of Proximal Development
- C) Scaffolding
- D) Emotional intelligence

50) ଏକ କାର୍ଯ୍ୟ କରିବାକୁ ପିଲାଙ୍କୁ ଦେଉଥିବା ପିତାମାତା କିମ୍ବା ଶିକ୍ଷକମାନଙ୍କ ଅସ୍ଥାୟୀ ସମର୍ଥନକୁ କୁହାଯାଏ -

- A) ଧାନର ସମୟ ଅବଧି
- B) ନିକଟବର୍ତ୍ତୀ ବିକାଶର କ୍ଷେତ୍ର(ଯୋଗ୍ୟ ଅଫ୍ ପ୍ରୋକ୍ସିମାଲ୍ ଡେଭଲପମେଣ୍ଟ)
- C) ସ୍କାଫୋଲ୍ଡିଂ
- D) ସଂବେଗାତ୍ମକ ବୁଦ୍ଧି

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Section 5 - Paper II Physics

No. of Questions: 30

51) The specific resistance of all metals is most affected by

- A) Temperature
- B) Pressure
- C) Degree of illumination
- D) Applied magnetic field

52) Ohm's law is true for which of the following?

- A) Metallic conductors
- B) Insulators
- C) Semiconductors
- D) Diode

53) A metallic ring is attached with the wall of a room. When the north pole of a magnet is brought near to it, the induced current in the ring will be

- A) first in clockwise then in anticlockwise direction
- B) in clockwise direction
- C) in anticlockwise direction
- D) first in anticlockwise then in clockwise direction

54) If a soap bubble is given a negative charge, then its radius

- A) Decreases
- B) Increases
- C) Remains unchanged
- D) Nothing can be predicted as information is insufficient

55) If the distance between two masses is doubled, then the gravitational force between them

- A) Doubled
- B) Becomes four times
- C) Is reduced to half
- D) Is reduced to a quarter

56) For a uniformly accelerated motion, the velocity-time graph

- A) is a straight line
 - B) is a curve
 - C) is parabolic
 - D) decreases and then increases
-

57) The quantity which remains constant when the torque acting on the body is zero is

- A) Linear velocity
 - B) Angular momentum
 - C) Angular displacement
 - D) Force
-

58) The linear momentum 'p' possessed by a body of mass 'm' and moving with velocity 'v' is expressed as

- A) $p = m/v$
 - B) $p = mv$
 - C) $p = v^2/m$
 - D) $p = v/2m$
-

59) A person who has short sightedness is advised by an ophthalmologist to wear spectacles including a

- A) plane lens
 - B) convex lens
 - C) concave lens
 - D) concavo-convex lens
-

60) The transverse nature of light can be explained using the phenomenon of

- A) Polarisation
 - B) Interference
 - C) Diffraction
 - D) Refraction
-

61) A lens is said to be diverge if the width of the beam increases after refraction through it. The lens is

- A) concave lens
- B) convex lens
- C) plano convex lens
- D) concavo-convex lens

62) A wire of length 10 m and cross-sectional area 10^{-6} m^2 is stretched with a force of 20 N. If the elongation is 1 mm, Young's modulus of the wire (in N/m^2) is

- A) 10^{10}
- B) 10^{11}
- C) 2×10^{10}
- D) 2×10^{11}

63) Elasticity is the property of material by virtue of which it

- A) occupies minimum surface area
- B) is always in equilibrium
- C) tends to regain its original shape and size when the applied force is removed
- D) tends to deform without any rupture when the applied force is removed

64) A wave that consists of crests and troughs and the particles of the medium vibrate at right angles to the direction of propagation of the wave is called a

- A) Transverse wave
- B) Longitudinal wave
- C) Pulse wave
- D) Tsunami Waves

65) With the increase in temperature, the frequency of sound in an organ pipe is found to

- A) be constant
- B) decrease
- C) increase
- D) be erratic

66) A wire has a resistance of 12Ω . It is bent in the form of equilateral triangle. The effective resistance between any two corners of the triangle is

- A) 12Ω
- B) 8Ω
- C) $8/3 \Omega$
- D) $3/8 \Omega$

67) A coil of area 80 square cm and 50 turns is rotating with 2000 revolutions per minute about an axis perpendicular to a magnetic field of 0.05 Tesla. The maximum value of the e.m.f. developed in it is

- A) 200π V
- B) $10\pi/3$ V
- C) $4\pi/3$ V
- D) $2/3$ V

68) The magnetic flux Φ (in weber) linked with a coil is given by an equation $\Phi = 8t^2 + 3t + 5$. The induced e.m.f. in the coil at $t = 4$ s will be

- A) -16 V
- B) -39 V
- C) -67 V
- D) -145 V

69) A charge q is placed at the centre of the open end of cylindrical vessel. The flux of the electric field through the surface of the vessel is

- A) Zero
- B) q / ϵ_0
- C) $q / 2\epsilon_0$
- D) $2q / \epsilon_0$

70) Eight drops of mercury of equal radii possessing equal charges combine to form a big drop. Then the capacitance of bigger drop compared to each individual small drop is

- A) 8 times
- B) 2 times
- C) 4 times
- D) 32 times

71) If the change in the value of 'g' at a height 'h' above the surface of the earth is the same as at a depth 'x' below it, then
(where, both 'x' and 'h' being much smaller than the radius of the earth)

- A) $x = h$
- B) $x = 2h$
- C) $x = h/2$
- D) $x = h^2$

72) A body falls freely under gravity. Its speed is v when it has lost an amount U of the gravitational energy. Then its mass is

- A) Ug/v^2
 - B) U^2/g
 - C) $2U/v^2$
 - D) $2Ugv^2$
-

73) The impulse imparted to a ball of mass 0.15 kg when the batsman hits the ball without changing its initial speed of 14 ms^{-1} in the direction of the bowler is

(Assume linear motion of the ball)

- A) zero
 - B) 1.86 Ns
 - C) 4.2 Ns
 - D) 18.6 Ns
-

74) The tension on the strings when the lift of mass 100 kg is accelerating upwards with an acceleration of 2 ms^{-2} is

- A) 100 N
 - B) 780 N
 - C) 980 N
 - D) 1180 N
-

75) When white light passes through a prism, it gets split up into constituent colours and the colour which gets deviated most is

- A) Red
 - B) Yellow
 - C) Violet
 - D) Blue
-

76) The mirror which produces a virtual image and is always magnified is a

- A) Plane mirror
- B) Convex mirror
- C) Concave mirror
- D) Plano convex mirror

77) What will be the temperature at which the oxygen molecules will have the same rms velocity as hydrogen molecules at 150°C ?

(Molar weight of oxygen is 32 and that of hydrogen is 2)

- A) 2495°C
- B) 4495°C
- C) 6495°C
- D) 8495°C

78) If E is coefficient of elasticity and ρ is density of the medium, then the velocity ' v ' of sound waves is given by the relation

- A) $v = (E/\rho)^{1/2}$
- B) $v = (\rho/E)^{1/2}$
- C) $v = \rho/E$
- D) $v = \rho E$

79) The velocity ' v ' of transverse waves in a stretched string is given by the relation (where, ' T ' is the tension in the string and ' m ' is the mass per unit length of the string)

- A) $v = Tm$
- B) $v = T/m$
- C) $v = (T/m)^{1/2}$
- D) $v = m/T$

80) The quantities that get transmitted in the propagation direction when a longitudinal wave propagates through a medium are

- A) mass and momentum
- B) energy and mass
- C) energy and linear momentum
- D) energy, mass and linear momentum

Section 6 - Paper II Chemistry

No. of Questions: 30

81) Which among the following is the volume occupied by a mole of gas at Standard Temperature and Pressure?

- A) 2.24 litres
- B) 22.4 litres
- C) 1.12 litres
- D) 11.2 litres

82) What is the equivalent mass of sodium carbonate?

- A) 53
- B) 106
- C) 40
- D) 56

83) Which of the following molecule has linear structure?

- A) BF_3
- B) BeCl_2
- C) PCl_5
- D) CH_4

84) Which of the following is the favorable factor for forming ionic bonding?

- A) Ionisation enthalpy of both the atoms must be high
- B) Ionisation enthalpy of both the atoms must be low
- C) Low ionisation enthalpy of metal atom
- D) High ionisation enthalpy of metal atom

85) Which of the following is a weak acid?

- A) HCl
- B) NaOH
- C) CH_3COOH
- D) NH_4OH

86) What is the solubility product(K_{sp}) for the reaction, $PbI_2 \leftrightarrow Pb^{2+} + 2I^-$?

- A) $K_{sp} = [Pb^{2+}] [I^-]$
 - B) $K_{sp} = [Pb^{2+}] [I^-]^2$
 - C) $K_{sp} = [Pb^{2+}]^2 [I^-]$
 - D) $K_{sp} = [Pb^{2+}] [I^-]^{0.5}$
-

87) Identify the type of the reaction $CuSO_4 + Zn \rightarrow Cu + ZnSO_4$.

- A) Neutralization reaction
 - B) Precipitation reaction
 - C) Redox reaction
 - D) Complexation reaction
-

88) Which should indicate the amount of energy released when an electron is added to the gaseous atom to form a negative ion?

- A) Ionization enthalpy
 - B) Electronegativity
 - C) Electron affinity
 - D) Valency
-

89) Which of the following method involves heating ore in the presence of air?

- A) Reduction
 - B) Carbon-reduction
 - C) Smelting
 - D) Roasting
-

90) Dehydrohalogenation of 1,2-dihalides produces:

- A) alkenes
 - B) alkynes
 - C) alkanes
 - D) alkoxides
-

91) Functional groups of aldehyde and alcohol respectively are:

- A) $COOH$, OH
- B) CHO , NH_2
- C) OH , NH_2
- D) CHO , OH

92) Ammonium cyanate when heated gives which product?

- A) urea
- B) thiourea
- C) uric acid
- D) cyanourea

93) Which of the following indicates critical pressure?

- A) The minimum pressure required to cause liquefaction at critical temperature
- B) The pressure exerted by the gas at critical temperature
- C) The maximum pressure required to cause liquefaction at critical temperature
- D) The pressure exerted by the vapour at dynamic equilibrium

94) Which of the following orbitals usually has a spherical shape?

- A) s-orbital
- B) p-orbital
- C) d-orbital
- D) f-orbital

95) Which of the following quantum number describes direction in which an electron spins?

- A) Principal quantum number
- B) Azimuthal quantum number
- C) Magnetic quantum number
- D) Spin quantum number

96) Calculate the molecular mass of ammonium carbonate. [Atomic mass of N = 14, C = 12, O = 16 and H = 1]

- A) 48
- B) 49
- C) 96
- D) 108

97) What is the bond angle for the molecule undergoing sp^2 hybridization?

- A) 90°
 - B) 109°
 - C) 120°
 - D) 180°
-

98) Calculate the pK_b of acetate ion. [pK_a of acetic acid = 4.7447]

- A) 6.7447
 - B) 8.7447
 - C) 2.2553
 - D) 9.2553
-

99) Identify the type of the reaction $2H_2O_2 \rightarrow 2H_2O + O_2$.

- A) Decomposition reaction
 - B) Disproportionation reaction
 - C) Metal displacement reaction
 - D) Non-metal displacement reaction
-

100) What is the balanced equation for the reaction, $(Fe^{2+}) + Cr_2O_7^{2-} \rightarrow (Fe^{3+}) + Cr^{3+}$ (Acid medium)?

- A) $2(Fe^{2+}) + Cr_2O_7^{2-} + 14H^+ \rightarrow 2(Fe^{3+}) + 2(Cr^{3+}) + 5H_2O$
 - B) $6(Fe^{2+}) + Cr_2O_7^{2-} + 14H^+ \rightarrow 6(Fe^{3+}) + 2(Cr^{3+}) + 7H_2O$
 - C) $3(Fe^{2+}) + Cr_2O_7^{2-} + 14H^+ \rightarrow 3(Fe^{3+}) + 2(Cr^{3+}) + 4H_2O$
 - D) $3(Fe^{2+}) + Cr_2O_7^{2-} + 14H^+ \rightarrow 3(Fe^{3+}) + 3(Cr^{3+}) + 6H_2O$
-

101) Which of the following indicates elements with atomic numbers 2, 10, 18 and 36?

- A) Halogens
 - B) Light metals
 - C) Heavy metals
 - D) Inert gases
-

102) Which of the following cations has the smallest radius?

- A) Na^+
- B) Rb^+
- C) Mg^{2+}
- D) K^+

103) Which of the following process uses cyanide in the purification of silver?

- A) Magnetic separation
 - B) Hydraulic washing
 - C) Froth floatation process
 - D) Leaching
-

104) What reaction is involved in aluminothermic process?

- A) $\text{Fe}_2\text{O}_3 + 2\text{Al} \rightarrow 2\text{Fe} + \text{Al}_2\text{O}_3$
 - B) $\text{Al}_2\text{O}_3 + 2\text{NaOH} + 3\text{H}_2\text{O} \rightarrow 2[\text{NaAl}(\text{OH})_4]$
 - C) $4\text{Al} + 3\text{O}_2 \rightarrow 2\text{Al}_2\text{O}_3$
 - D) $\text{Al}_2\text{O}_3 + 3\text{Mg} \rightarrow 2\text{Al} + 3\text{MgO}$
-

105) Ozonolysis of alkenes produces:

- A) alcohols
 - B) aldehydes
 - C) alkanes
 - D) alcohols
-

106) Dehydration of alcohols produces:

- A) alkanes
 - B) alkynes
 - C) alkenes
 - D) alcohols
-

107) Amino acids contain which functional groups among the following options?

- A) CHO, NH₂
 - B) CHO, COOH
 - C) COOH, NO₂
 - D) COOH, NH₂
-

108) Calculate the pressure exerted when a cylinder containing butane gas at 11°C of 7.1 atmospheres is exposed to sunlight at 23°C.

- A) 6.5 atm
- B) 6.8 atm
- C) 7.4 atm
- D) 7.7 atm

109) What will be the minimum pressure required to compress 500 dm³ of air at 1 bar to 250 dm³ at 30°C?

- A) 2.0 bar
- B) 2.5 bar
- C) 1.5 bar
- D) 0.5 bar

110) Calculate the energy of 10 photons of radiation whose frequency is 1×10^{14} Hz. [$h=6.626 \times 10^{-34}$ Js]

- A) 6.626×10^{-19} J
- B) 6.626×10^{-20} J
- C) 6.626×10^{-21} J
- D) 6.626×10^{-27} J

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Section 7 - Paper II Mathematics

No. of Questions: 40

111) The equation of the line passing through the point (1, -1, 1) and parallel to the vector $i-j+k$ is

A) $\frac{x-2}{1} = \frac{y+1}{2} = \frac{z-1}{1}$

B) $\frac{x-1}{1} = \frac{y+1}{-1} = \frac{z-1}{1}$

C) $\frac{x-1}{1} = \frac{y-1}{2} = \frac{z-1}{1}$

D) $\frac{x-6}{1} = \frac{y+1}{1} = \frac{z-1}{2}$

112) $\lim_{x \rightarrow 2} \frac{2x^2 + 3x + 1}{x + 2} =$

A) $13/4$

B) $15/4$

C) $17/4$

D) $19/4$

113) Distance of the point (-2,5) from y-axis

A) -2

B) 5

C) 2

D) -5

114) Coordinates of the centroid of Triangle with vertices (0,0) , (3a,0) , (0,3b)

A) (a,b)

B) (-a,-b)

C) (a,-b)

D) (-a,b)



115) 1 hectare is equal to

- A) 100 m^2
 - B) $1,000 \text{ m}^2$
 - C) 10 m^2
 - D) $10,000 \text{ m}^2$
-

116) Volume (in cubic. cm) of a cylinder with base radius 7 cm and height 20 cm is

- A) 1,540
 - B) 3,080
 - C) 2,560
 - D) 1,920
-

117) The largest integer that divides the product of any four consecutive integers is

- A) 4
 - B) 6
 - C) 12
 - D) 24
-

118) The product of a rational number and an irrational number is

- A) Natural number
 - B) Composite number
 - C) Rational number
 - D) Irrational number
-

119) The probability of getting head in a throw of an unbiased coin is

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

120) If the probability of getting a spade card is $1/4$, then the probability of NOT getting a spade card is

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

121) The roots of the quadratic equation are real and equal if the discriminant is _____ zero.

- A) \geq
 - B) \leq
 - C) \neq
 - D) $=$
-

122) One non zero root of the equation $(2\sqrt{2})^{x^2} = 8^{3x}$

- A) 4
 - B) 0
 - C) 6
 - D) 5
-

123) One solution of the quadratic equation $2x^2 - 7x = 39$ is

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

124) If $A = \{1,2,3,4\}$ and $B = \{a,b,c\}$ then total number of relations between A and B is _____.

- A) 2^{12}
 - B) 2^{14}
 - C) 2^{16}
 - D) 2^5
-

125) Series expansion at origin is called

- A) Logarithmic
- B) exponential
- C) Maclaurins
- D) Taylors

126) What is the sum of first 12 natural numbers?

- A) 78
 - B) 156
 - C) 13
 - D) 75
-

127) Which of the following is true

- A) $A \cup B = A - B$
 - B) $(A \cup B)' = A' \cap B'$
 - C) $(A \cup B)' = A' \cup B'$
 - D) $A \cup B = B - A$
-

128) An ogive is used to determine

- A) Mean
 - B) Median
 - C) Geometric mean
 - D) Harmonic mean
-

129) Greatest value of $\sin A \cdot \cos A$

- A) 1
 - B) 0.5
 - C) 1.5
 - D) 0
-

130) If the length of the shadow of a pole is $\sqrt{3}$ times the height of the pole, then the angle (in degrees) of elevation of the sun is

- A) 30
 - B) 60
 - C) 45
 - D) 90
-

131) The equation of the plane passing through $(-10,5,4)$ and perpendicular to the line joining the points $(4,-1,2)$ and $(-3,2,3)$ is

- A) $x-3y-z+79=0$
- B) $7x-3y-z+89=0$
- C) $7x-y-z+9=0$
- D) $x-y-z+89=0$

132) If $f(x) = (x-4)/2\sqrt{x}$, then $f'(x)$ at $x=1$ is

- A) $5/4$
- B) $4/5$
- C) 0
- D) 1

133) The derivative of $\cos(\sin^2 x)$ at $x = \sqrt{\pi/2}$

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

134) Eccentricity of Hyperbola $x^2 - y^2 = a^2$

- A) $3/2$
- B) 1
- C) $\sqrt{2}$
- D) $1/$

135) Area of the circle with centre at (1,2) and passing through (4,6) is

- A) 5π sq unit
- B) 10π sq unit
- C) 15π sq unit
- D) 25π sq unit

136) Area (in sq. cm) of a quadrant of a circle with circumference 22 cm is

- A) $77/8$
- B) 77
- C) $88/7$
- D) 88

137) What is the area of the major sector of a circle of radius 10 cm if the arc subtend an angle of 90°

- A) $550/7$
- B) $1650/7$
- C) $220/7$
- D) $124/7$

138) A number when divided by 3, 5 or 7 gives remainder 2. The number is

- A) 107
- B) 111
- C) 105
- D) 109

139) The number 2784936 is divisible by which one of the following numbers?

- A) 85
- B) 86
- C) 88
- D) 92

140) A card is taken out at random from a pack of 52 cards numbered from 1 to 52. The probability that the number on the card is a prime number less than 20 is

- A) $\frac{1}{12}$
- B) $\frac{2}{12}$
- C) $\frac{3}{13}$
- D) $\frac{2}{13}$

141) In a simultaneous throw of two dice, the probability of getting a total sum of 8 is

- A) $\frac{3}{36}$
- B) $\frac{4}{36}$
- C) $\frac{5}{36}$
- D) $\frac{6}{36}$

142) The maximum/minimum value of $f(x) = 2x^2 + x - 3$ is

- A) $-\frac{3}{2}$
- B) $-\frac{25}{8}$
- C) $\frac{3}{2}$
- D) $\frac{25}{8}$

143) Minimum possible number of real roots of a quadratic equation is

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

144) The inverse function for $f(x) = 3x + 5$ is _____.

- A) $f^{-1}(x) = \frac{x-5}{3}$
- B) $f^{-1}(x) = \frac{2x-3}{5}$
- C) $f^{-1}(x) = \frac{4x-5}{4}$
- D) $f^{-1}(x) = \frac{4x-9}{15}$

145) The sequence $\left\{ \frac{2n^2+1}{2n^2-1} \right\}$ converges to

- A) 2
- B) 1
- C) 0
- D) 4

146) The series whose n^{th} term is $\sin(1/n)$

- A) Converges
- B) uniformly converges
- C) oscillates
- D) diverges

147) If $A = \{1,2,3,5\}$ $B = \{5,6,7\}$ then $A-B =$ _____

- A) $\{2,3\}$
- B) $\{1,2,3,5\}$
- C) $\{1,2,3\}$
- D) $\{6,7\}$

148) In a class of 70 students, 10 students failed and their average marks is 26. If the total marks obtained by the entire class is 3500, then the average marks of those who passed is

- A) 54
- B) 59
- C) 62
- D) 65

149) The angle of elevation of the top of the tower from two points at a distance a and b from the base and in the same straight line with it are complementary. Find the height of tower

- A) ab
- B) $a+b$
- C) \sqrt{ab}
- D) $\sqrt{(a+b)}$

150) Maximum Value of $\sin A + \cos A$

- A) 1
- B) 2
- C) $\sqrt{2}$
- D) $\frac{1}{\sqrt{2}}$

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Answer Key

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

