

A - SECTION - I

ODIA (COMPULSORY FOR ALL STREAMS)

1. ଅଳସୁଆର ବାରବାଟୀ ଚାଷ । — ଏହାର ଅର୍ଥ କ'ଣ ?
 (A) ଅଳସୁଆ ବ୍ୟକ୍ତି ଚାଷ କରି ନ ପାରିବା
 (B) ନିକମା ଲୋକର ବୃଥା ଆହ୍ୱାନନ
 (C) ଚତୁରତା ସହିତ କାର୍ଯ୍ୟ କରିବା
 (D) ସାମର୍ଥ୍ୟ ଠାରୁ ଅଧିକ କାମ କରି ପାରିବା
2. ଦରିଦ୍ରତା — ପକ୍ଷପୂର୍ଣ୍ଣ ମୋ ଜୀବନ-ସର ଜଞ୍ଜାଳ — ଜଳଦ-ଜଳେ ଆବିଳ ଉଦର । — ଏଥିରେ କେଉଁ ଅଳଙ୍କାର ପ୍ରଯୁକ୍ତ ?
 (A) ରୂପକ (B) ଶ୍ଳେଷ
 (C) ଉତ୍ପ୍ରେକ୍ଷା (D) ଉପମା
3. ତେଣୁ ଜି ତରଙ୍ଗେ ଅପମାନ ଭରେ ଶିର ପିନ୍ଧୁଥିଲେ ତରଣୀ ପଞ୍ଜରେ — ଏଥିରେ କେଉଁ ଅଳଙ୍କାର ପ୍ରଯୁକ୍ତ ?
 (A) ଉପମା (B) ଉତ୍ପ୍ରେକ୍ଷା
 (C) ଅନୁପ୍ରାସ (D) ଶ୍ଳେଷ
4. କୃଦନ୍ତ ପଦଟିକୁ ବାଛ :
 (A) ଚାଣକ୍ୟ (B) ଦୈତ୍ୟ
 (C) ଭାକ୍ୟ (D) ବୀର୍ଯ୍ୟ
5. 'ରୋଗୀ' ଶବ୍ଦଟି କେଉଁ ତତ୍ତ୍ୱିତ ପ୍ରତ୍ୟୟ ଦ୍ୱାରା ଗଠିତ ?
 (A) ଇନ (B) ଇୟସ୍
 (C) ଇନ୍ (D) ବିନ୍
6. ବୃକ୍ଷରୁ ତାଳ ଛିଣ୍ଡି ତଳେ ପଡ଼ିଗଲା । ରେଖାଙ୍କିତ ପଦଟି କେଉଁ ବିଭକ୍ତି ଯୁକ୍ତ ହୋଇଛି ?
 (A) ଦୃତୀୟା (B) ପଞ୍ଚମୀ
 (C) ଷଷ୍ଠୀ (D) ସପ୍ତମୀ
7. ଦୁର୍ବଳ ଶରୀର ଯୋଗୁ ସେ ଚାଲିପାରୁ ନାହାନ୍ତି । ରେଖାଙ୍କିତ ଅଂଶଟି କେଉଁ ପଦ ?
 (A) ବିଶେଷଣ (B) ଅବ୍ୟୟ
 (C) ବିଶେଷ୍ୟ (D) ସର୍ବନାମ
8. ଆଡ଼ ଆଡ଼ ହେବା । — ଏହାର ଅର୍ଥ କ'ଣ ?
 (A) ଆଡ଼ ଆଖିରେ ନୁ ଚାହିଁବା
 (B) ଆଡ଼େଇ ଦେଇ ଉଲ୍ଲେଖବା
 (C) ସଂକୋଚ ବୋଧ କରିବା
 (D) ଅନାଦର କରୁଥିବା ବ୍ୟକ୍ତିକୁ ଆଦରି ନେବା
9. 'ଆଚାରନିପୁଣ' — କେଉଁ ସମାସ ନିଷ୍କର ?
 (A) ତତ୍ପୁରୁଷ (B) କର୍ମଧାରୟ
 (C) ଦ୍ୱିବ୍ର (D) ବହୁବ୍ରାହି
10. ପ୍ରିତାପ୍ରଜ୍ଞା ଯାହାର, ସେ — ସମସ୍ତ ପଦଟି ବାଛ :
 (A) ପ୍ରିତପ୍ରାଣ (B) ପ୍ରିତିପ୍ରଜ୍ଞା
 (C) ପ୍ରିତପ୍ରଜ୍ଞ (D) ପ୍ରିତପ୍ରାଣା

ପ୍ରଦତ୍ତ ଅନୁଛେଦଟି ପାଠକରି ପ୍ରଶ୍ନ (11 ରୁ 15)

ଗୁଡ଼ିକର ଉତ୍ତର ଦିଅ :

ସାହିତ୍ୟକୁ ଆଞ୍ଚଳିକପରିସରରୁ ମୁକ୍ତିଦେବା କ୍ଷେତ୍ରରେ ଅନୁବାଦର ଭୂମିକା ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ । ଏହା ଦ୍ୱାରା ଗୋଟିଏ ଭାଷାଭାଷୀ ଅଞ୍ଚଳର ଲୋକ ଅନ୍ୟ ଭାଷାଭାଷୀ ସାହିତ୍ୟ, ସଭ୍ୟତା ଓ ସଂସ୍କୃତି ସହିତ ପରିଚିତ ହୁଅନ୍ତି । ଯେଉଁ ଭାଷାରୁ ଅନୁବାଦ କରାଯାଏ ତାହାକୁ 'ଉତ୍ସଭାଷା' ଓ ଯେଉଁ ଭାଷାକୁ ଅନୁବାଦ କରାଯାଏ ତାହା 'ଲକ୍ଷ୍ୟଭାଷା' ଭାବେ ପରିଚିତ । ମାତ୍ର ଆକ୍ଷରିକ ଅନୁବାଦ ଅନୁବାଦକର ଦୂର୍ବଳତା ବୋଲି ଗ୍ରହଣ କରାଯାଏ । ଅନୁବାଦ କରିଥାରେ ଚାହାଣି, ଚଳଣି ଓ ଚମକର ଅନୁବାଦ ହୁଏ । ଶବ୍ଦଭିତରେ ଲୁଚିଥିବା ସଂସ୍କୃତି, ପରମ୍ପରା, ଇତିହାସ, ପୁରାଣ, କଳାଦର୍ଶନ ମଧ୍ୟ ଅପର ଭାଷାର କ୍ଷେତ୍ରକୁ ଯାଏ, ସାହିତ୍ୟର ଉଦ୍ଦେଶ୍ୟ ବିସ୍ତାରିତ ହୁଏ, କ୍ଷେତ୍ର ପ୍ରସାରିତ ହୁଏ, ସଦ୍ଭାବ ଓ ସମନ୍ୱୟ ପ୍ରତିଷ୍ଠା ପାଏ । ଉଦାର ହୃଦୟ, ଗ୍ରହଣଶୀଳତା, ଭାଷାଜ୍ଞାନ, ସଂସ୍କୃତି ଅବଧାରଣା ଅନୁବାଦକର କାର୍ଯ୍ୟକୁ ସହଜ କରିଥାଏ । ଭାଷାଭେଦ, ଭାଷାର କ୍ଷମତାବିସ୍ତାର ମନୋବୃତ୍ତିକୁ ଆଖିରେ ରଖି ଅନୁବାଦ କରାଯାଏ ନାହିଁ ।

11. କ'ଣ ଅନୁବାଦର ଲକ୍ଷ୍ୟ ନୁହେଁ ?

- (A) ସାହିତ୍ୟର କ୍ଷେତ୍ର ପରିବ୍ୟାପ୍ତ କରିବା
- (B) ସାଂସ୍କୃତିକ ସମନ୍ୱୟର ପ୍ରତିଷ୍ଠା କରିବା
- (C) ଆଞ୍ଚଳିକ ସଂସ୍କୃତି ସ୍ଥାପନ କରିବା
- (D) ଶାସକଙ୍କ ଭାଷାର ପ୍ରସାର କରିବା

12. ଭଲ ଅନୁବାଦକ ହେବା ପାଇଁ କ'ଣ ଆବଶ୍ୟକ ?

- (A) ଭାଷା ଓ ବ୍ୟାକରଣ ଜ୍ଞାନ
- (B) ସଂସ୍କୃତି ଓ ପରମ୍ପରା ପ୍ରତି ସଚେତନତା
- (C) ଇତିହାସ ବୋଧ
- (D) (A), (B) ଓ (C) ଏହି ତିନୋଟି

13. 'ତାମିଲ୍' ଗପବହିକୁ ହିନ୍ଦୀରେ ଅନୁବାଦ କରାଯାଇଛି । ଏ କ୍ଷେତ୍ରରେ ଉତ୍ସଭାଷା କେଉଁଟି ?

- (A) ତାମିଲ୍
- (B) ହିନ୍ଦୀ
- (C) ଅନୁବାଦକର ମାତୃଭାଷା
- (D) ତାମିଲ୍ ଓ ହିନ୍ଦୀ

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413346 14. କେଉଁଟି ଜଣେ ଉତ୍ତମ ଅନୁବାଦକର ଦୃଷ୍ଟିଭଙ୍ଗୀ ହେବା ଉଚିତ ନୁହେଁ ?

- (A) ସାହିତ୍ୟର କ୍ଷେତ୍ର ପ୍ରସାର
(B) ସଂସ୍କୃତିର ଅବଧାରଣା
(C) ସଦ୍ଭାବ ଓ ସମବୃଦ୍ଧ ପ୍ରତିଷ୍ଠା
(D) ଭାଷାଭେଦ ମନୋବୁଦ୍ଧି

413346 15. ଅନୁବାଦକର ଦୂର୍ବଳତା ବୋଲି କାହାକୁ ଗ୍ରହଣ କରାଯାଏ ନାହିଁ ?

- (A) ଆକ୍ଷରିକ ଅନୁବାଦ
(B) ଭାଷାଜ୍ଞାନର ଅଭାବ
(C) ସାହିତ୍ୟର ଉଦ୍ଦେଶ୍ୟ ବିପ୍ଳାବ
(D) ସାଂସ୍କୃତିକ ଚେତନା ପ୍ରସାରର ଅଭାବ

413346 16. ଆପଣା କଳା କର୍ମମାନ, ଆରୁ ହୋଇବ ସାବଧାନ । — ରେଖାଙ୍କିତ ଅଂଶଟି କେଉଁ ପ୍ରକାର ସର୍ବନାମ ?

- (A) ନିର୍ଣ୍ଣାୟକ ସର୍ବନାମ
(B) ନିର୍ଦ୍ଦେଶାତ୍ମକ ସର୍ବନାମ
(C) ଆମ୍ଭାତ୍ମକ ସର୍ବନାମ
(D) ପୁରୁଷବାଚକ ସର୍ବନାମ

413346 17. ବେଦଜ୍ଞାନର ଉତ୍ସାର, କିନ୍ତୁ ବେଦର ଜ୍ଞାନଲାଭ ନିମନ୍ତେ ନିରନ୍ତର ଅଧ୍ୟବସାୟ ଲୋଡ଼ା । — ଏହା କେଉଁ ପ୍ରକାର ବାକ୍ୟ ?

- (A) ସରଳ (B) ଜଟିଳ
(C) ଯୌଗିକ (D) ଖଣ୍ଡ

413346 18. କେଉଁଟି ଶବ୍ଦ ବିଧି ଆଧାରରେ ଗଠିତ ଶବ୍ଦ ନୁହେଁ ?

- (A) ରଣ (B) ଦୃଶ
(C) ମଣି (D) ବର୍ଣ୍ଣ

413346 19. ଶୁଦ୍ଧ ଶବ୍ଦଟିକୁ ବାନ୍ଧ ।

- (A) ଅମାୟ (B) ଅସ୍ତାବସ୍ତ
(C) ଅନାଦନ (D) ଅତେଷ୍ଟ

413346 20. ଶୁଦ୍ଧ ବାକ୍ୟଟି ତିହାଇ ଦିଅ ।

- (A) ପ୍ରତ୍ୟେକ ଶ୍ରମିକମାନେ କାରଖାନାର କାର୍ଯ୍ୟାଳୟ ଆଡ଼କୁ ମାଡ଼ିଗଲେ ।
(B) ଶ୍ରମିକମାନେ ଜନତାମାନଙ୍କ ଆଡ଼କୁ ମାଡ଼ିଗଲେ ।
(C) ସବୁ ଜନତାମାନେ କାରଖାନାର କାର୍ଯ୍ୟାଳୟ ଆଡ଼କୁ ମାଡ଼ିଗଲେ ।
(D) ଶ୍ରମିକମାନେ କାରଖାନାର କାର୍ଯ୍ୟାଳୟ ଆଡ଼କୁ ମାଡ଼ିଗଲେ ।

A - SECTION - II

ENGLISH (COMPULSORY FOR ALL STREAMS)

21. I ordered it the phone.
 (A) by (B) on
 (C) in (D) with
22. I the pains for three weeks now.
 (A) had had (B) have had
 (C) had (D) am having
23. The fifty pounds he gave me soon spent.
 (A) are (B) was
 (C) have been (D) were
24. Your eyes are red. You
 (A) have been crying
 (B) have cried
 (C) had cried
 (D) had been crying
25. This factory turns two hundred cars a week.
 (A) in (B) on
 (C) out (D) with
26. Rohit, who always helps me in my study, is my best friend.
 The underlined part in the sentence above is
 (A) a describing relative clause
 (B) a defining relative clause
 (C) an identifying relative clause
 (D) a non-defining relative clause

27. My sister said, 'Remember to bring the umbrella.'
 The indirect speech of the above sentence is :
 (A) My sister requested me to bring the umbrella.
 (B) My sister told me to bring the umbrella.
 (C) My sister said to me that I bring the umbrella.
 (D) My sister reminded me to bring the umbrella.

Read the poem carefully. On the basis of your reading, answer the questions that follow choosing the most appropriate options (from Qs. No. 28 to 32).

Sticks and stones may break my bones, but words can also hurt me.
 Stones and sticks break only skin, while words are ghosts that haunt me.
 Slant and curved the word-swords fall to pierce and stick inside me.
 Bats and bricks may ache through bones, but words can mortify me.
 Pain from words has left its scar on mind and heart that's tender.
 Cuts and bruises now have healed.
 It's words that I remember.

28. What will be imprinted in heart and mind ? Pain caused by
 (A) cuts and bruises
 (B) words
 (C) stones and sticks
 (D) bats and bricks
29. The expression 'words are ghosts' is a
 (A) simile
 (B) conceit
 (C) metaphor
 (D) direct comparison
30. According to the poet 'sticks and bricks' cause
 (A) mental pain
 (B) discomfort felt in heart
 (C) suffering in mind
 (D) physical pain
31. The main message of the poem is
 (A) words can hurt more and last longer than physical blows.
 (B) sticks and stones are dangerous.
 (C) physical pain is worse than words and last longer.
 (D) we should not speak at all to avoid pain.
32. The word 'pierce' in the poem means
 (A) penetrate (B) perceive
 (C) parse (D) peer
33. Which of the following are not always stressed at the time of reading aloud or speaking ?
 (A) Auxiliary verbs
 (B) Verbs
 (C) Nouns
 (D) Adverbs
34. In which situation is the 'rising tone' not usually used ?
 (A) Statements
 (B) Yes/No-type questions
 (C) Requests
 (D) Wh-questions showing politeness
35. Which of the following is a polysyllabic word ?
 (A) Sound
 (B) Pencil
 (C) Maintain
 (D) Application
- Read the following passage carefully and answer the questions (from Q. No. 36 to Q. No. 40) choosing the correct option :
- As everyone knows, Columbus had three ships on his first voyage, the Nina, the Pinta, and the Santa Maria. The flagship Santa Maria had the nick name La Gallega. It was a nao, which simply means 'ship' in old Spanish : today, we might call such a ship a carrack. She was fat

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and slow, designed for hauling cargo, not for exploration. Some sources say that Santa Maria was about 100 tons, meaning that it could carry 100 tone ladas, which are large casks of wine. There has been much speculation about just how large such a ship would be ; the best current thinking by Carla Rahn Phillips, puts the length of Santa Maria at 18 metres, keel length at 12 metres, beam 6 metres and a depth of 3 metres from keel to deck. The Santa Maria had three masts (fore, main, and mizzen), each of which carried one large sail. The fore sail and main sail were square ; the sail on the mizzen, or rear mast was a triangular sail known as lateen. In addition, the ship carried a small square sail on the bowsprit, and small topsail on the main mast above the main sail.

36. This passage is about

- (A) the flagship Santa Maria
- (B) the voyages of Columbus
- (C) the first voyage of Columbus
- (D) the discovery of Columbus

37. What was the ship Santa Maria designed for ?

- (A) transporting cargo
- (B) carrying war weapons
- (C) carrying travellers
- (D) exploring new lands

38. Which of the following words, used in the passage, means "A large sailing ship with multiple masts and sails" ?

- (A) caravel
- (B) ferry
- (C) cruise
- (D) carrack

39. 'It' in the first paragraph refers to

- (A) his first voyage
- (B) his first exploration
- (C) the Santa Maria
- (D) the old Spanish

40. The sail on the was triangular.

- (A) foremast
- (B) main mast
- (C) rear mast
- (D) middle mast

B - SECTION - III

ARTS GROUP - ODIA (OPTIONAL)

41. 'ନାୟକ' ଶବ୍ଦକୁ ଯୁକ୍ତିବିଚ୍ଛେଦ କଲେ କ'ଣ ହେବ?

- (A) ନୈ + ଅକ (B) ନେ + ଅକ
(C) ନା + ଯକ (D) ନି + ଏକ

42. ପିଲାମାନେ ଗପ ଶୁଣୁଛନ୍ତି ।

ରେଖାଙ୍କିତ ପଦଟି କେଉଁ କାରକ ?

- (A) କର୍ତ୍ତାକାରକ
(B) କର୍ମକାରକ
(C) କରଣକାରକ
(D) ଅପାଦାନକାରକ

43. ଲୋଭରୁ ପାପ, ପାପରୁ ମୃତ୍ୟୁ ।

ରେଖାଙ୍କିତ ପଦର ବିଭକ୍ତି ନିର୍ଣ୍ଣୟ କର ।

- (A) ଦ୍ୱିତୀୟା (B) ତୃତୀୟା
(C) ଚତୁର୍ଥୀ (D) ପଞ୍ଚମୀ

44. "ସେହେତୁ ପରିବାରରେ ଅଶାନ୍ତି ହୋଇଛି, ତେଣୁ ମୋହନ କଟକ ଗଲା ନାହିଁ ।"

— ଏହା କି ପ୍ରକାରର ବାକ୍ୟ ?

- (A) ସରଳ (B) ଜଟିଳ
(C) ଯୌଗିକ (D) ମିଶ୍ର

45. ଶୁଦ୍ଧ ଶବ୍ଦଟିକୁ ବାଛ :

- (A) ପୌରହିତ୍ୟ (B) ଅନୁଦିତ
(C) ଆଶ୍ରୀବାଦ (D) ଦିଗାମ୍ବର

ପ୍ରଦତ୍ତ ଅନୁଚ୍ଛେଦଟି ପାଠକରି ନିମ୍ନ ପ୍ରଶ୍ନର ଉତ୍ତର ଦିଅ :

ଯେଉଁମାନେ ଭୂ-ରାଜସ୍ୱ ବା ଖଜଣା ଦେଲେ ନାହିଁ ଇଂରେଜ ସରକାର ସେମାନଙ୍କଠାରୁ ଜମି ନିଜ ହାତକୁ ନେଇ ଯାଉଥିଲେ । ଆଦିବାସୀମାନଙ୍କର କେତେକ ପାରମ୍ପରିକ ନିୟମକୁ ଭାଙ୍ଗିଦିଆଯିବା ଫଳରେ ସେମାନଙ୍କ ଭିତରେ ବିଦ୍ରୋହ ମୁଖ୍ୟ ଟେକିଲା । ଦେଶ ଜନିତ ବିଚାର ଅପେକ୍ଷା ନିଜ ଭୂମି, କୃଷିକ୍ଷେତ୍ର, ରାସ୍ତାମାନ ଓ ସାଂସ୍କୃତିକ ପରିବେଷ୍ଟନକୁ ରକ୍ଷାକରିବା ପାଇଁ ସେମାନେ ସଂଗ୍ରାମକୁ ଓହ୍ଲାଇଲେ । ଇଂରେଜ ସରକାର ବଳ ପ୍ରୟୋଗ କରି ଅନେକ ଆନ୍ଦୋଳନକୁ ଦମନ କଲେ । ମାତ୍ର ବିଦ୍ରୋହର ସ୍ୱର ବିପ୍ଳବୀର ଦେଶାତ୍ମର, ପରାଜୟ ମଧ୍ୟ ପରବର୍ତ୍ତୀ ସମୟରେ ପୁଞ୍ଜୀଭୂତ ହୋଇ ଏକ ସାମଗ୍ରିକ ବିଦ୍ରୋହରେ ରୂପାନ୍ତରିତ ହେଲା ।

46. ଆଦିବାସୀମାନେ ଦେଶ ଅପେକ୍ଷା କାହାକୁ ଅଧିକ ଗୁରୁତ୍ୱ ଦେଉଥିଲେ ?

- (A) ଖଜଣା
(B) ଦେଶ ଜନିତ ବିଚାର
(C) ସାଂସ୍କୃତିକ ପରିବେଷ୍ଟନର ସୁରକ୍ଷା
(D) ଦେଶ ଗଠନ ଓ ରକ୍ଷାପାତ୍ର

47. 'ଉତ୍କଳ ଭ୍ରମଣ' ପୁସ୍ତକର ରଚୟିତା କିଏ ?

- (A) ଗୋପାଳ ଚନ୍ଦ୍ର ପ୍ରହରାଜ
(B) ଗୋପୀନାଥ ମହାନ୍ତି
(C) ଫକୀରମୋହନ ସେନାପତି
(D) ଭୀମଭୋଇ

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SET - C

48. ଶେଷରୁ ପୁଅର ଭାବ ନାହିଁ ।

ରେଖାଙ୍କିତ ଅଂଶର ପଦ ନିର୍ଣ୍ଣୟ କର :

(A) ବିଶେଷ୍ୟ (B) ବିଶେଷଣ

(C) ସର୍ବନାମ (D) ଅବ୍ୟୟ

49. 'ଅ' ପ୍ରତ୍ୟୟ ଯୋଗ ହୋଇଥିବା କୃତର

ପଦଟିକୁ ବାଛ :

(A) ଭୟ (B) ସହ୍ୟ

(C) ଦେୟ (D) ସୁକ୍ତ

50. 'ଆ' ପ୍ରତ୍ୟୟ ନିଷ୍ପନ୍ନ ତତ୍ତ୍ୱିତ ପଦଟି ବାଛ :

(A) ଲୁଣିଆ (B) ହରିଆ

(C) ସହରିଆ (D) କଣ୍ଟାଳିଆ

51. 'କେହି ରହି ନାହିଁ' ରହିବେ ନାହିଁଟି

ଭବରଜ୍ଞ ଭୂମିତଳେ

ସର୍ବେ ନିଜନିଜ ଅଭିନୟ ସାରି

ବାହୁଡ଼ିବେ କାଳବଳେ ।

— ଏହା କେଉଁ ଛନ୍ଦରେ ରଚିତ ?

(A) ଶୁଦ୍ଧରୀ (B) ନଟବାଣୀ

(C) ସଙ୍ଗଳାଶ୍ରୀ (D) ଚୋଷ୍ଟ

52. "ଦୁଃଖସାଗରେ ମୁହିଁ ଭାସୁଛି ଦୀନ

କୃପାନଉକା ଦିଅ ରତ୍ନନନ୍ଦନ ।"

— ଏହା କେଉଁ ଅଳଙ୍କାରରେ ରଚିତ
ହୋଇଛି ?

(A) ଅନୁପ୍ରାସ (B) ରୂପକ

(C) ଉପମା (D) ଉତ୍ପ୍ରେକ୍ଷା

53. 'ଯୁବତୀ ଜାୟା ଯାହାର' — ଏକ ପଦରେ

ପ୍ରକାଶ କଲେ କ'ଣ ହେବ ?

(A) ଯୁବଜାନୀ (B) ଯବଜାନୀ

(C) ଯୁବାଯାୟା (D) ଯୁବଜାନି

54. 'ପଞ୍ଚବଟୀ' କେଉଁ ସମାସ ନିଷ୍ପନ୍ନ ପଦ ?

(A) ଦ୍ରବ୍ୟ (B) ଦ୍ୱିଗୁ

(C) କର୍ମଧାରୟ (D) ତତ୍ତ୍ୱରୂପ

55. 'ଛାଇ ପଡ଼ିଲେ ନାହିଁ ଡେଇଁବା' ରୁଡ଼ିଟିର

ଅର୍ଥ କ'ଣ ?

(A) ଡିକ୍ଟ ସମ୍ପର୍କ

(B) ଅତି ଅସ୍ଥିର ସ୍ୱଭାବ

(C) ଆଦୌ ସମ୍ପର୍କ ନ ରଖିବା

(D) ନିଜ ଲୋକ ଶତ୍ରୁ

SET - C

B - SECTION - III
ARTS GROUP - ENGLISH (OPTIONAL)

56. Teaching grammar should aim at in language learning and teaching.
- (A) developing literal knowledge
(B) developing language skills
(C) writing better in examinations
(D) solving problems in language learning
57. What kind of questions do help the learners understand the use and meaning of pronouns in a text ?
- (A) Global questions
(B) Factual questions
(C) Referential questions
(D) Inferential questions
58. Which is not applicable for 'authentic materials' ?
- (A) Mainly produced for language teaching
(B) Designed to convey a real message of some sort
(C) Produced for a particular group of audience
(D) Not simplified for the addressee

Read the poem carefully. On the basis of your reading, answer the questions from 59 to 61 choosing the most appropriate options :

When did my childhood go ?

Was it the day I ceased to be eleven,

Was it the time I realised that Hell

and Heaven

Could not be found in Geography,

And therefore could not be,

Was that the day !

When did my childhood go ?

Was it the time I realised that adults

were not all they seemed to be

They talked of love and preached

of love

But did not act so lovingly,

Was that the day !

59. According to the poet, Hell and

Heaven could not be found

in

- (A) Geography
(B) Science
(C) History
(D) Mathematics

SET - **C**

60. The poet first thought that his childhood ended when he

- (A) turned ten
- (B) ceased to be eleven
- (C) turned twelve
- (D) started going to school

61. Who did not act so lovingly ?

- (A) The child
- (B) The poet
- (C) The adults
- (D) The lover

62. Manas said to his brother, "What shall I do ?"

The indirect speech of the above sentence is

- (A) Manas asked his brother what he should do.
- (B) Manas asked his brother what shall he do.
- (C) Manas told his brother what he should do.
- (D) Manas said to his brother that what he should do.

63. Which of the following words has the 'z' sound at the end ?

- (A) caps
- (B) mats
- (C) sacks
- (D) dogs

64. Language is mostly learnt through 'exposure' and 'use' in

- (A) rules
- (B) structures
- (C) contexts
- (D) skills

Read the passage carefully. On the basis of your reading, answer the questions from 65 to 67 choosing the most appropriate options :

Now the sage turned to the very surprised Rama Nath and said, "There is no magic potion that can turn things into gold. You worked hard on your land and created this plantation. While you looked after the trees, your wife sold the fruits in the market. That's how you got this money. It was your hard work that created this wealth, not magic. If I had told you about this earlier, you would not have listened to me, so I played a trick on you."

Rama Nath understood the wisdom behind these words and worked even harder on his plantation from that day on.

SET - C

65. Why did the sage play a trick on Rama Nath ?

(A) The sage wanted to punish him.

(B) Rama Nath would not have listened to him if he had been told earlier.

(C) The sage wanted to make him rich.

(D) The sage wanted to make fun.

66. What did Rama Nath understand at the end ?

(A) The magic is real.

(B) He should give up farming.

(C) The wisdom behind the sage's words.

(D) His wife cheated him.

67. The word 'potion' used in the passage means

(A) liquid with no magical power

(B) liquid that could make gold coins

(C) hard work with magical power

(D) liquid with magical power

68. These days, mumps not at all difficult to cure.

(A) is (B) are

(C) have (D) were

69. I was getting late, so we set off home.

(A) to (B) at

(C) in (D) for

70. They studied hard although they were tired.

The underlined clause in the sentence above is an adverb clause of

(A) comparison

(B) concession

(C) condition

(D) reason

B - SECTION - III

ARTS GROUP - HISTORY & POLITICAL SCIENCE (OPTIONAL)

71. The Right to Constitutional Remedies empowers citizens to :
- (A) Seek employment from the government
 - (B) Approach courts to enforce rights
 - (C) Obtain free legal membership
 - (D) Gain immunity from taxation
72. Which function makes the Supreme Court a guardian of the Constitution ?
- (A) Advisory jurisdiction of treaties
 - (B) Role in administering elections
 - (C) Authority to issue budget document
 - (D) Power of judicial review
73. Who appoints the Chief Minister of a state ?
- (A) President on the advice of Prime Minister
 - (B) Governor on the basis of majority
 - (C) High Court Justice alone
 - (D) Election Commission with approval
74. Which provision ensures women's participation in local governance ?
- (A) 20% reservation in state offices
 - (B) 30% reservation in the parliament
 - (C) 33% reservation in local bodies
 - (D) 5% reservation in urban wards
75. Which feature distinguishes a political party from a pressure group ?
- (A) Both have mass participation
 - (B) Both represent public interests
 - (C) Parties seek political power
 - (D) Pressure group forms governments
76. India's principle of Non-Alignment aims to :
- (A) join all military alliances
 - (B) avoid alignments with power blocs
 - (C) encourage colonial dominance
 - (D) promote exclusive partnerships

77. Which feature best represents Akbar's architecture ?

- (A) Red sandstone with Indian and Persian elements
- (B) White marble with delicate floral inlay work
- (C) Plain brick walls with very little decoration
- (D) Dark granite buildings with massive stone pillars

78. Which factor most directly enabled the British victory at Plassey ?

- (A) Superior British artillery and cavalry
- (B) Widespread peasant support for the company
- (C) Political betrayal within Siraj-ud-Daulah's camp
- (D) Generous revenue concessions from Bengal landlords

79. Who of the following led the revolt of 1857 in Oudh ?

- (A) Nana Saheb
- (B) Begum Hazrat Mahal
- (C) Tantia Tope
- (D) Lakshmibai

80. Which strategy marked Civil Disobedience Movement as distinct from earlier movements ?

- (A) Refusal to support British war efforts
- (B) Disobedience of specific law like salt tax
- (C) Formation of underground revolutionary cells
- (D) Emphasis on constitutional petitions

81. Why is the First World War often called a global war ?

- (A) Soldiers and resources came from many parts of the world
- (B) Every independent country fought on the same side together
- (C) The war remained limited only to European battlefields throughout
- (D) International organisations prevented fighting outside Europe entirely

SET - C

82. Which feature of the Indian constitution ensures that no single organ of the government becomes too powerful ?

- (A) Parliamentary supremacy is maintained
- (B) Fundamental duties are given priority
- (C) Separation of powers is incorporated
- (D) Independent judiciary is eliminated

83. A tourist notices that an ancient temple has a square sanctum, a flat roof and minimal external decoration. With which period is the temple most likely associated ?

- (A) Early Gupta period
- (B) Mature Mauryan period
- (C) Kushana period
- (D) Sultanate period

84. Which ancient Indian text is correctly matched with its scientific contribution ?

- (A) Charaka Samhita — Surgical instrument and operative procedures
- (B) Sushruta Samhita — Theories of planetary movement and eclipses
- (C) Arthashastra — Metallurgical techniques for rust free iron
- (D) Rasaratna-kara — Chemistry of metals and alchemical process

85. Alauddin Khalji's market regulations were primarily intended to :

- (A) encourage rural artisanal production for export
- (B) maintain low price to support military campaigns
- (C) promote domestic trade through tax exemptions
- (D) shift control of markets to autonomous guilds

SET - C

B - SECTION - III

ARTS GROUP - GEOGRAPHY & ECONOMICS (OPTIONAL)

86. In which atmospheric layer does temperature rise rapidly to register 1200°C or more ?
 (A) Troposphere
 (B) Stratosphere
 (C) Thermosphere
 (D) Mesosphere
87. Which pressure belt is formed by buoyancy and expansion of air ?
 (A) Equatorial high pressure belt
 (B) Sub-tropical low pressure belt
 (C) Sub-polar low pressure belt
 (D) Polar high pressure belt
88. Which ocean current does moderate the climate of western Europe by transporting warm water from the tropics ?
 (A) North equatorial current
 (B) North Atlantic Drift
 (C) Gulf stream
 (D) Labrador current
89. What does the concept of carrying capacity in the context of Sustainable Development imply ?
 (A) The volume of industrial goods produced in an area.
 (B) The amount of carbon emission a factory can release
 (C) The maximum population an environment can support
 (D) The maximum number of people who can get jobs in a country
90. Which is not the function of the central bank ?
 (A) Lending to Government
 (B) Lending to commercial banks
 (C) Financial services to the government
 (D) Banking facilities for public
91. Which measure was taken by Government of India to control inflation in 1970's ?
 (A) Contain unproductive expenditure and budget deficits
 (B) Increase production of public goods
 (C) Adopt an export oriented strategy
 (D) Streamline public distribution system

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SET - C

92. Which variety of coal is known as the brown coal ?

- (A) Anthracite
(B) Bituminous
(C) Lignite
(D) Peat

93. Which soil is most suitable for cotton cultivation ?

- (A) Laterite (B) Alluvial
(C) Red (D) Regur

94. Which pair is not correctly matched ?

Landform Agent

- (A) Crag and Tail River
(B) Rock Pedestal Wind
(C) Rapids River
(D) Arete Glacier

95. Which valley is the coldest place in India ?

- (A) Drass (B) Kullu
(C) Kashmir (D) Kangra

96. Where is the western syntaxial bend of the Himalayas located ?

- (A) Namcha Barwa
(B) Nanga Parbat
(C) Nanda Devi
(D) Dhauligiri

97. Which of the following rivers does not form a delta ?

- (A) Brahmani (B) Kaveri
(C) Narmada (D) Krishna

98. Through which continent does the longitude of 30°E pass ?

- (A) Asia
(B) Africa
(C) South America
(D) Australia

99. Which year is known as the great divide in India's demographic history ?

- (A) 1931 (B) 1921
(C) 1911 (D) 1901

100. Who among the following scholars developed the concept of disguised unemployment ?

- (A) Morris D. Morris
(B) John Keynes
(C) Joan Robinson
(D) Amartya Sen

B - SECTION - III

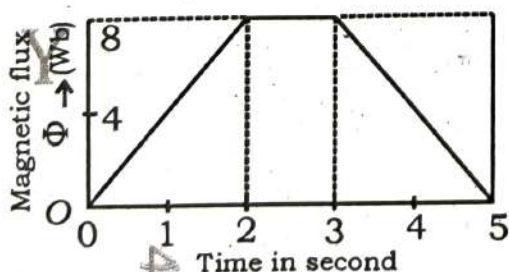
SCIENCE (PCM) PHYSICS

41. A spherical sound wave propagates through air from an isotropic point source. At a distance of 100 m, the sound level is 100 dB. Neglecting absorption by air, the sound level at a distance of 2 km is [Given $\log_{10}(20) = 1.3$]
- (A) 60 dB (B) 64 dB
(C) 74 dB (D) 80 dB
42. A car moving at 108 km/h blows a horn of frequency 600 Hz. Another car follows it at the same speed, while a third car approaches them from the opposite direction at the same speed. The temperature of air is 30°C . If the speed of sound at 0°C is 312 m/s, the frequency heard by the second and third cars respectively are
- (A) 600 Hz, 600 Hz
(B) 600 Hz, 660 Hz
(C) 600 Hz, 720 Hz
(D) 660 Hz, 720 Hz
43. Which of the following properties shows that light is a transverse wave?
- (A) Reflection
(B) Diffraction
(C) Interference
(D) Polarization
44. Which of the following sources gives best monochromatic light?
- (A) A candle
(B) A bulb
(C) A mercury tube
(D) A sodium lamp
45. A room is illuminated by n identical electric lamps, each consuming a current I_0 . The lamps are connected to a main supply by a pair of lead-in wires, each of length l . The resistivity of the wire material is ρ . If the maximum permissible voltage drop in the supply line is V_1 , what is the minimum cross-sectional area A of each wire?
- (A) $A = \frac{2nI_0\rho l}{V_1}$
(B) $A = \frac{nI_0\rho l}{V_1}$
(C) $A = \frac{2\rho l}{nI_0 V_1}$
(D) $A = \frac{\rho l}{2nI_0 V_1}$

46. An electric kettle has two heating coils A and B. When coil A alone is switched on, the water boils in 15 minutes, and when coil B alone is switched on, the water boils in 30 minutes, using the same supply voltage. If t_1 and t_2 are the times taken to boil the water, when the two coils are connected in series and parallel respectively, assuming no heat loss the ratio $\frac{t_1}{t_2}$ will be

- (A) 2 (B) $\frac{5}{2}$
(C) $\frac{9}{2}$ (D) 9

47. The magnetic flux Φ linked with a coil varies with time as shown in the figure below. The coil has 10 turns and a resistance of 5Ω . The total heat produced in the coil during the interval 0 to 5s is



- (A) 640 J (B) 730 J
(C) 960 J (D) 1280 J

48. The self inductance L of a solenoid of length l and cross-section A with a fixed number of turns N increases as

- (A) l and A increase
(B) l decreases and A increases
(C) l increases and A decreases
(D) both l and A decrease

49. Which of the following quantities remains constant in a planetary motion (consider elliptical orbits) as seen from the sun?

- (A) Speed
(B) Angular speed
(C) Kinetic energy
(D) Angular momentum

50. A rope of 1 cm in diameter breaks if the tension in it exceeds 500 N. The maximum tension that may be given to a similar rope of diameter 2 cm is

- (A) 500 N (B) 250 N
(C) 1000 N (D) 2000 N

51. The dimension of $ML^{-1}T^{-2}$ can correspond to

- (A) moment of force
(B) surface tension
(C) modulus of elasticity
(D) co-efficient of viscosity

SET - C

52. A rigid vessel of volume V contains a mass m of a diatomic ideal gas of molar mass M at absolute temperature T . A fraction η of the gas molecules dissociates according to $X_2 \rightarrow 2X$. Assuming ideal behaviour, the pressure of the gas is

(A) $P = \frac{mRT}{MV}$

(B) $P = \frac{mRT}{MV} (1 - \eta)$

(C) $P = \frac{mRT}{MV} (1 + \eta)$

(D) $P = \frac{2mRT}{MV}$

53. Drops of water fall at equal intervals from the roof of a building of height 20 m. The first drop strikes the ground at the same instant when the fifth drop is released. The distances between successive drops in the air at that instant, starting from the top, are in the ratio :

($g = 10 \text{ m/s}^2$)

(A) 1 : 3 : 5 : 7

(B) 2 : 4 : 6 : 8

(C) 1 : 2 : 3 : 4

(D) 7 : 5 : 3 : 1

54. A pendulum consists of a bob of mass m suspended by a light inextensible string of length l . The bob is pulled aside until the string is horizontal and then released from rest. Neglect air resistance and mass of the string. The minimum strength of the string required, so that it does not break during the motion is :

(A) 1 mg (B) 6 mg

(C) 3 mg (D) 4 mg

55. An airplane flying horizontally at a constant speed of 350 km/hr over ground level releases the food supplies. Ignoring the effect of air resistance, the initial horizontal and vertical components of velocity are :

(A) 97.22 m/s and 0 m/s respectively

(B) 0 m/s and 97.22 m/s respectively

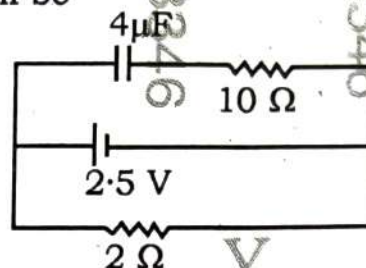
(C) 66.66 m/s and 33.22 m/s respectively

(D) 33.22 m/s and 66.66 m/s respectively

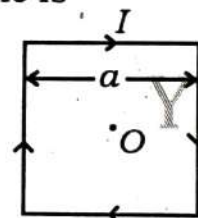
SET - C

56. A uniform spherical shell gradually shrinks maintaining its shape. The gravitational potential at the centre
- increases
 - decreases
 - remains constant
 - oscillates
57. The images formed by a concave mirror are
- always real
 - always virtual
 - real or virtual depending on object distance
 - virtual if the object is between centre of curvature and focus
58. A point charge $+q$ is placed at a distance d from an isolated conducting plane. The field at a point P on the other side of the plane is
- directed perpendicular to the plane and away from the plane
 - directed perpendicular to the plane and towards the plane
 - directed radially away from the point charge
 - directed radially towards the point charge

59. A capacitor of $4 \mu\text{F}$ is connected as shown in the figure below. The internal resistance of the battery is 0.5Ω . The amount of charge on the capacitor plate will be



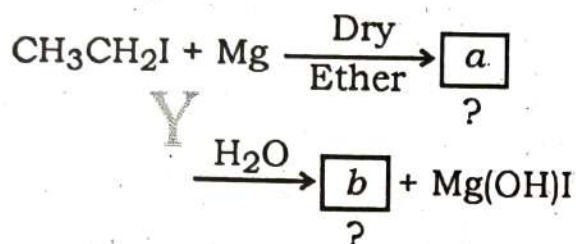
- 0
 - $8 \mu\text{C}$
 - $4 \mu\text{C}$
 - $16 \mu\text{C}$
60. A square loop of side ' a ' carries a steady current I as shown in the figure below. The current is clockwise when viewed from above. A unit magnetic pole is placed at the centre of the square. The force acting on the unit pole is



- $\frac{\mu_0 I}{\pi a}$, directed out of the plane
- $2\sqrt{2} \frac{\mu_0 I}{\pi a}$, directed into the plane
- $2 \frac{\mu_0 I}{\pi a}$, directed out of the plane
- zero, because forces due to opposite sides cancel

B - SECTION - III
SCIENCE (PCM) CHEMISTRY

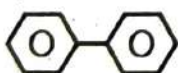
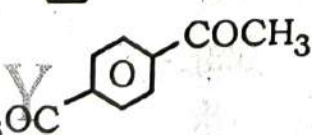
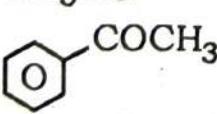
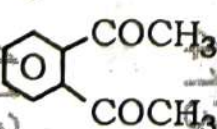
61. What are a and b in the following reaction ?



- (A) CH_3MgI and CH_4
 (B) $\text{CH}_3\text{CH}_2\text{MgI}$ and $\text{CH}_3 - \text{CH}_3$
 (C) $\text{CH}_3\text{CH}_2\text{MgI}$ and CH_4
 (D) $\text{CH}_3\text{CH}_2\text{MgI}$ and $\text{CH}_3 - \text{CH}_2 - \text{CH}_3$

62. Write the product of the following reaction :



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

63. Which set of species is isoelectronic ?

- (A) Na, Mg, Al, Si
 (B) Na^+ , K^+ , Rb^+ , Cs^+
 (C) Na^+ , Mg^{2+} , O^{2-} , F^-
 (D) O^{2-} , S^{2-} , F^- , Cl^-

64. The atom having largest ionisation enthalpy in period 2 is

- (A) Li (B) B
 (C) Be (D) N

65. At equilibrium for the reaction $2\text{SO}_2(g) + \text{O}_2(g) \rightleftharpoons 2\text{SO}_3(g)$ the concentration of reactants and products at 727°C were found to be $\text{SO}_2 = 0.27 \text{ mol L}^{-1}$; $\text{O}_2 = 0.40 \text{ mol L}^{-1}$; and $\text{SO}_3 = 0.33 \text{ mol L}^{-1}$.

What is the value of the equilibrium constant, K_c at this temperature ?

- (A) 5.34 (B) 3.7
 (C) 4.2 (D) 0.66

SET - C

66. For a supersaturated solution, the ionic product is

(A) equal to its solubility product

(B) less than the solubility product

(C) greater than the solubility product

(D) none of these

67. Which of the following is the principal ore of aluminium?

(A) Cassiterite

(B) Magnetite

(C) Bauxite

(D) Haematite

68. Which of the following metals is extracted by the process of electrolysis?

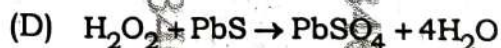
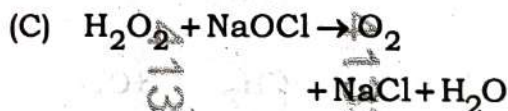
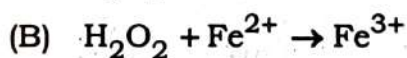
(A) Zinc

(B) Sodium

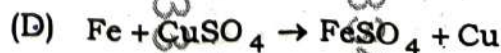
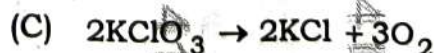
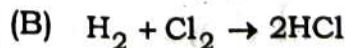
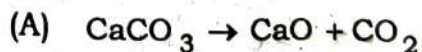
(C) Copper

(D) Iron

69. Which of the following reactions shows hydrogen peroxide (H_2O_2) acting as a reducing agent?



70. Which of the following reactions is a displacement type redox reaction?

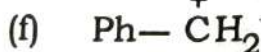
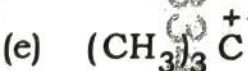
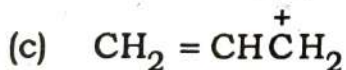
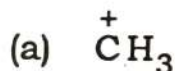


71. The IUPAC name of the following molecule is



- (A) 2,3,3-trimethylcyclobutene
(B) 1,4,4-trimethylcyclobutene
(C) 1,2,2-trimethylcyclobutene
(D) 1,1,2-trimethylcyclobutene

72. Arrange the following carbocations in their decreasing order of stability :

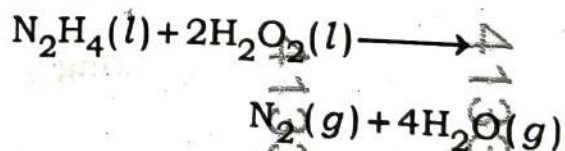


- (A) $e > f > c > b > a > d$
(B) $c > e > f > b > a > d$
(C) $f > c > e > b > d > a$
(D) $f > e > c > b > d > a$

73. Which of the following quantities of matter contains largest amount of mass in grams ?

- (A) 1.50 moles of CH_4 molecules
(B) 2.50 moles of NaCl formula units
(C) 1.68 moles of N_2 molecules
(D) 1.68 moles of N atoms

74. A mixture of hydrazine (N_2H_4) and hydrogen peroxide (H_2O_2) is used as a fuel for rocket engines. These two substances react as shown by the following chemical equation :



How many grams of H_2O_2 are needed to completely react with 50.0 g of N_2H_4 ?

- (A) 100 g H_2O_2
(B) 150 g H_2O_2
(C) 106 g H_2O_2
(D) 110 g H_2O_2

413346

SET - C

75. Based on the combined gas law, if both the volume and kelvin temperature of a gas sample are doubled, the pressure will
- (A) double
(B) quadruple
(C) be halved
(D) remain the same
76. Which of the following conditions will increase the vapour pressure of an aqueous solution ?
- (A) Addition of Na_2SO_4
(B) Addition of H_2O
(C) Addition of NaCl
(D) Addition of 1.00 molal KI
77. Predict the property of a chemical bond between phosphorus and bromine
- (A) Non-polar covalent
(B) Polar covalent
(C) Ionic
(D) None of these
78. To which group will an element with atomic number 88 belong ?
- (A) Group 2 (B) Group 10
(C) Group 12 (D) Group 17
79. Predict the hybridization and shape of sulphur hexafluoride.
- (A) dsp^2 , Square planar
(B) d^2sp^3 , Octahedral
(C) sp^3d^2 , Octahedral
(D) None of these
80. The maximum number of electrons that can be accommodated in a sublevel for which $l = 3$ is
- (A) 8 (B) 14
(C) 10 (D) 6

SET - C

B - SECTION - III
SCIENCE (PCM) MATHEMATICS

81. A debt of Rs. 14,160 is to be paid in 48 weekly instalments. If the instalments are in A.P. with initial instalment Rs. 60, then the fifth one will be
 (A) Rs. 90 (B) Rs. 150
 (C) Rs. 100 (D) Rs. 200
82. $\frac{2}{3!} + \frac{4}{5!} + \frac{6}{7!} + \dots = \dots\dots\dots$
 (A) e (B) $2e$
 (C) e^2 (D) e^{-1}
83. The ratio in which x -axis divides the segment joining $(1, 2)$ and $(-2, -1)$ is
 (A) 2:1 (B) 1:2
 (C) 1:1 (D) 1:3
84. If one vertex of an equilateral triangle inscribed in a circle $x^2 + y^2 = a^2$ is $(a, 0)$, $a > 0$, then the co-ordinates of the midpoint of the side opposite to the vertex is
 (A) $(\frac{3a}{2}, 0)$ (B) $(\frac{a}{2}, 0)$
 (C) $(\frac{-a}{2}, 0)$ (D) $(0, \frac{-a}{2})$
85. If $3 \sin^{-1} x + \cos^{-1} x = \pi$, then $x = \dots\dots\dots$
 (A) $\sqrt{2}$ (B) $\frac{1}{\sqrt{2}}$
 (C) $\frac{\sqrt{3}}{2}$ (D) 0
86. The minute hand of a clock is 10 cm long. What is the area on the face of the clock described by the minute hand between 9 am and 9:35 am (in cm^2)?
 ($\pi \approx \frac{22}{7}$)
 (A) 173.3 (B) 163.5
 (C) 183.3 (D) 193.3
87. A metallic sphere of radius 10.5 cm is melted and recasted into small cones of radius 3.5 cm and height 3 cm each. How many cones will be obtained?
 (A) 128 (B) 126
 (C) 252 (D) 63

SET - C

88. If $A = (a_{ij})_{2 \times 2}$, where
 $a_{ij} = (i+j)^2$, then $A^{-1} = \dots\dots\dots$

- (A) $\frac{1}{16} \begin{bmatrix} 16 & -9 \\ -9 & 4 \end{bmatrix}$
 (B) $\frac{1}{17} \begin{bmatrix} 16 & -9 \\ -9 & 4 \end{bmatrix}$
 (C) $\frac{1}{17} \begin{bmatrix} 4 & -9 \\ -9 & 16 \end{bmatrix}$
 (D) $\frac{1}{17} \begin{bmatrix} 16 & 9 \\ 9 & -4 \end{bmatrix}$

89. The quadratic equation whose roots are less than those of $x^2 - px + q = 0$ by 2, is

- (A) $x^2 + (p-2)x + (q-2) = 0$
 (B) $x^2 - (p-4)x + (q-4) = 0$
 (C) $x^2 + (p-4)x + (q-2p+4) = 0$
 (D) $x^2 - (p-4)x + (q-2p+4) = 0$

90. The set of all 2×2 matrices with real entries under matrix multiplication is a/an

- (A) semi-group but not a monoid
 (B) monoid
 (C) normal subgroup
 (D) abelian group

91. If $f(x)$ is differentiable at $x = a$ and $f'(a) = 2f(a)$, then the value of

$$\lim_{x \rightarrow a} \frac{x^3 f(a) - a^3 f(x)}{x - a} = \dots\dots\dots$$

- (A) $a(2-3a)f(a)$
 (B) $a^2(3-2a)f(a)$
 (C) $a(3-2a)f(a)$
 (D) $a(3-2a^2)f(a)$

92. The function

$$f(x) = x \left(1 + x + \frac{x^2}{2!} + \frac{x^3}{3!} + \dots \right)$$

is increasing in

- (A) R (B) $(-\infty, -1]$
 (C) $[1, \infty)$ (D) $[1, \infty)$

93. If $|A \cap B| = 99$, then
 $|(A \times B) \cap (B \times A)| = \dots\dots\dots$

- (A) 100 (B) 99
 (C) 0 (D) 99^2

94. Given the relation $R = \{(1, 2)\}$ on $\{1, 2, 3\}$, the minimum number of members added to R so that it becomes an equivalence relation is

- (A) 4 (B) 5
 (C) 6 (D) 9

SET - C

95. If $f: N \rightarrow R$ defined by

$$f(x+y) = 2f(x) \cdot f(y); f(1) = 2,$$

then $\sum_{k=1}^{10} f(k) = \dots\dots\dots$

(A) $\frac{1}{3}(2^{10} - 1)$

(B) $\frac{2}{3}(2^{20} - 1)$

(C) $\frac{5}{6}(2^{18} - 1)$

(D) $\frac{2}{3}(2^{18} - 1)$

96. The remainder when

$$6^{100} + 8^{13} + 9^3 + 1 \text{ is divided}$$

by 7, is

(A) 2 (B) 1

(C) 3 (D) 4

97. The distance of the plane

$$12x + 4y + 3z = 158 \text{ from the}$$

centre of the sphere

$$x^2 + y^2 + z^2 + 4x - 2y - 6z = 158$$

is

(A) $\frac{11}{13}$ (B) 1

(C) 13 (D) $\sqrt{13}$

98. In a test containing 5 multiple choice questions, each question has four distractors. By simple guessing what is the probability that a student can give 4 or more correct answer

(A) $\frac{1}{16}$

(B) $\frac{4}{(4)^5}$

(C) $\frac{15}{(4)^5}$

(D) $\frac{1}{64}$

99. The variance of 25 observations is 8. If each observation is multiplied by 5, the new variance becomes

(A) 5

(B) 40

(C) 200

(D) $\frac{8}{5}$

100. $\sqrt{2 + \sqrt{2 + \sqrt{2 + \sqrt{2 + 2\cos 8A}}}} = \dots$

(A) $2\cos \frac{A}{2}$

(B) $2\cos \frac{A}{4}$

(C) $2\cos A$

(D) $2\cos 2A$

SET - C

B - SECTION - III
SCIENCE (CBZ) CHEMISTRY

41. Predict the property of a chemical bond between phosphorus and bromine.

- (A) Non-polar covalent
(B) Polar covalent
(C) Ionic
(D) None of these

42. To which group will an element with atomic number 88 belong?

- (A) Group 2 (B) Group 10
(C) Group 12 (D) Group 17

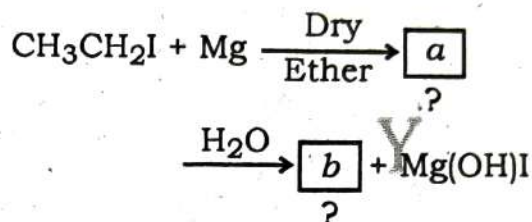
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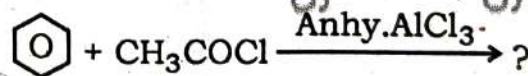
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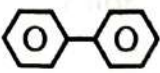
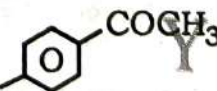
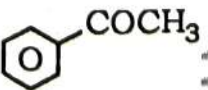
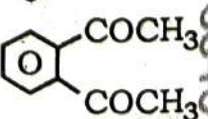


- (A) CH_3MgI and CH_4
(B) $\text{CH}_3\text{CH}_2\text{MgI}$ and $\text{CH}_3 - \text{CH}_3$
(C) $\text{CH}_3\text{CH}_2\text{MgI}$ and CH_4
(D) $\text{CH}_3\text{CH}_2\text{MgI}$ and



46. Write the product of the following reaction.



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

SET - C

47. Which set of species is isoelectronic ?

- (A) Na, Mg, Al, Si
 (B) Na^+ , K^+ , Rb^+ , Cs^+
 (C) Na^+ , Mg^{2+} , O^{2-} , F^-
 (D) O^{2-} , S^{2-} , F^- , Cl^-

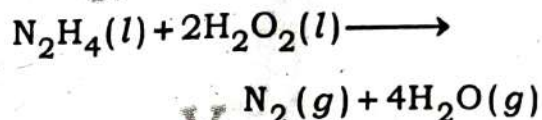
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 (C) 106 g H_2O_2
 (D) 110 g H_2O_2

51. Based on the combined gas law, if both the volume and kelvin temperature of a gas sample are doubled, the pressure will

- (A) double
 (B) quadruple
 (C) be halved
 (D) remain the same

SET - C

52. Which of the following conditions will increase the vapour pressure of an aqueous solution ?

- (A) Addition of Na_2SO_4
- (B) Addition of H_2O
- (C) Addition of NaCl
- (D) Addition of 1.00 molal KI

53. At equilibrium for the reaction

$$2\text{SO}_2(g) + \text{O}_2(g) \rightleftharpoons 2\text{SO}_3(g)$$

the concentration of reactants

and products at 727°C were

found to be $\text{SO}_2 = 0.27 \text{ mol L}^{-1}$;

$\text{O}_2 = 0.40 \text{ mol L}^{-1}$; and

$\text{SO}_3 = 0.33 \text{ mol L}^{-1}$.

What is the value of the equilibrium constant, K_c at this

temperature ?

- (A) 5.34
- (B) 3.7
- (C) 4.2
- (D) 0.66

54. For a supersaturated solution, the ionic product is

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- (B) less than the solubility product
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55. Which of the following is the principal ore of aluminium ?

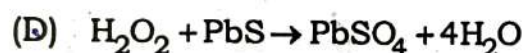
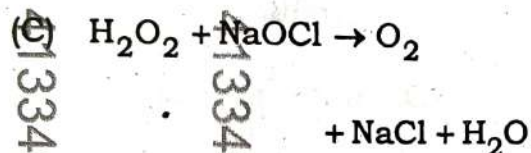
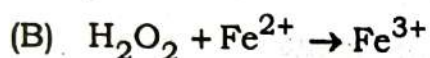
- (A) Cassiterite
- (B) Magnetite
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- (D) Haematite

56. Which of the following metals is extracted by the process of electrolysis ?

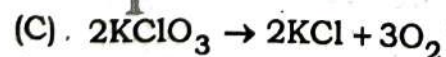
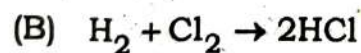
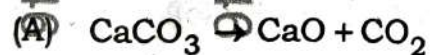
- (A) Zinc
- (B) Sodium
- (C) Copper
- (D) Iron

SET - C

57. Which of the following reactions shows hydrogen peroxide (H_2O_2) acting as a reducing agent?



58. Which of the following reactions is a displacement type redox reaction?



59. The IUPAC name of the following molecule is



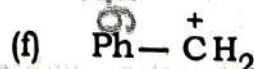
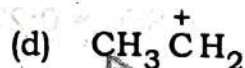
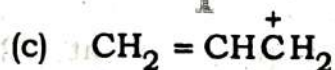
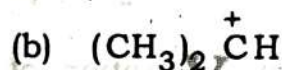
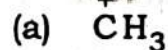
(A) 2,3,3-trimethylcyclobutene

(B) 1,4,4-trimethylcyclobutene

(C) 1,2,2-trimethylcyclobutene

(D) 1,1,2-trimethylcyclobutene

60. Arrange the following carbocations in their decreasing order of stability:



(A) $e > f > c > b > a > d$

(B) $c > e > f > b > a > d$

(C) $f > c > e > b > d > a$

(D) $f > e > c > b > d > a$

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SET - C

B - SECTION - III
SCIENCE (CBZ) BOTANY

61. In bundle sheath cells of C_4 plants, CO_2 combines with :
 (A) Pyruvate to form OAA
 (B) PEP to form OAA
 (C) PEP to form malate
 (D) RuBP to form PGA
62. In the process of photosynthesis, oxygen in a glucose comes from :
 (A) Water
 (B) CO_2
 (C) Both water and CO_2
 (D) ATP
63. The hormone that causes seed dormancy is :
 (A) Abscissic acid
 (B) Ethylene
 (C) Gibberellin
 (D) Cytokinin
64. The biological roles not associated with auxins is:
 (A) Apical dominance in plants
 (B) Induction of roots in stem cuttings
 (C) Bolting in rosette plants like cabbage
 (D) Phototropism
65. The numbers of phenotypes in the F_2 progeny of a cross between dihybrids as per Mendelism would be :
 (A) Four (B) Six
 (C) Nine (D) Sixteen
66. A red (RR) *Antirrhinum* is crossed with a white (rr) one, the offspring is pink (Rr). This is an example of :
 (A) Codominance
 (B) Complementary genes
 (C) Incomplete dominance
 (D) Pleiotropy

67. A diseased leaf shows some areas with dead tissue. This symptom is often referred to as :
- (A) Chlorosis
(B) Necrotic spots
(C) Galls
(D) Blight
68. Which of the following causes smut disease in wheat plants ?
- (A) *Puccinia*
(B) *Ustilago*
(C) *Albugo*
(D) *Phytophthora*
69. Which is generally not found in a monocot (e.g. corn) vascular bundle ?
- (A) Metaxylem
(B) Metaphloem
(C) Sclerified bundle sheath
(D) Cambium
70. Leaves with stomata only on the adaxial side are referred to as :
- (A) amphistomatous
(B) epistomatous
(C) hypostomatic
(D) mesostomatous
71. The increase in height of a plant body takes place by :
- (A) Lateral meristem
(B) Apical meristem
(C) Both apical and lateral meristems
(D) Intercalary meristem
72. During photosynthesis, PGA changes to phosphoglyceraldehyde (PGAL) due to :
- (A) Oxidation (B) Reduction
(C) Electrolysis (D) Hydrolysis
73. A protonema appears due to germination of :
- (A) Zygote (B) Spore
(C) Zygospor (D) Oospore
74. 5-kingdom system of classification was proposed by :
- (A) Linnaeus
(B) Whittaker
(C) Hutchinson
(D) Aristotle

SET - C

75. How many male gametes are produced in angiosperm to effect double fertilization and triple fusion ?

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

76. Which of the following is an example of *ex-situ* (outside natural habitat) conservation for plants ?

- (A) National Park
(B) Wildlife Sanctuary
(C) Green House
(D) Biosphere Reserve

77. Which is not a part of asexual reproduction in fungi ?

- (A) Conidia
(B) Binary fission
(C) New individuals from hyphal fragments
(D) Development of dikaryons

78. Micropropagation means :

- (A) Preparation of tissue in laboratory
(B) Plant cloning in aseptic condition
(C) Growing cells in nutrient media
(D) Preparation of new tissue by DNA recombination

79. The type of sexual reproduction in which both gametes are morphologically indistinguishable is :

- (A) Oogamy
(B) Anisogamy
(C) Isogamy
(D) Heterogamy

80. In a young anther, the nutritive tissue most likely to have polyploid cells is :

- (A) Tapetum
(B) Endothecium
(C) Epidermis
(D) Archegonium

B - SECTION - III

SCIENCE (CBZ) ZOOLOGY

81. In an open sea the first trophic level is occupied by :

- (A) Green plant
- (B) Phytoplanktons
- (C) Bacteria and Fungi
- (D) Grasses

82. Which pro-enzyme is secreted from the chief cells of the gastric gland ?

- (A) Pepsinogen
- (B) Pepsin
- (C) Trypsin
- (D) Rennin

83. How many ATP molecules are produced / net gain during anaerobic respiration (fermentation) of one molecule of glucose ?

- (A) 2
- (B) 38
- (C) 36
- (D) 2 to 4

84. Which molecule combines with oxaloacetate to initiate the TCA cycle ?

- (A) Fumarate
- (B) Isocitrate
- (C) Acetyl CoA
- (D) Pyruvic acid

85. What is the major function of endorphins ?

- (A) Inhibits pain
- (B) Darkens skin
- (C) Forms corpus albicans
- (D) Thermoregulation

86. 'Phrynosoma' is a member of the class :

- (A) Mammalia
- (B) Amphibia
- (C) Reptilia
- (D) Aves

87. In human gametes where is hyaluronidase enzyme present ?

- (A) Zona pellucida
- (B) Corona radiata
- (C) Behind distal centriole
- (D) Acrosomal granules

SET - C

88. In which animal eggs discoidal type of cleavage is seen ?
 (A) Sea urchin
 (B) Amphioxus
 (C) Bird
 (D) Starfish
89. According to genic balance theory what is the index of sex ratio for intersex individuals (in *Drosophila*) ?
 (A) 0.5 (B) 0.67
 (C) 1.0 (D) 1.5
90. The phenomenon of industrial melanism was first reported from which country ?
 (A) United Kingdom
 (B) USA
 (C) USSR
 (D) India
91. 'Survival of the fittest' is associated with which one of the following theories ?
 (A) Lamarckism
 (B) Mendelism
 (C) Darwinism
 (D) Mutationism
92. Which one of the following is responsible for Bhopal gas tragedy ?
 (A) Hydrogen cyanide
 (B) Isocyanic acid
 (C) Carbon monoxide
 (D) Methylisocyanate
93. Corpus callosum is a structure in which of the following mammals ?
 (A) Echidna
 (B) Duck-billed platypus
 (C) Man
 (D) Opossum

94. During which sub-phase of cell cycle RNA synthesis occurs ?
(A) G_0 phase
(B) M phase
(C) S phase
(D) G_1 and G_2 phase
95. How many hydrogen bonds are present between adenine and uracil ?
(A) One
(B) Two
(C) Three
(D) Four
96. Which one is a hypoploidy condition ?
(A) $2n + 1$
(B) $3n$
(C) $2n - 1$
(D) $2n$
97. Which of the following cells carry oxygen in blood ?
(A) RBCs
(B) WBCs
(C) T-lymphocytes
(D) Platelets
98. Mitral valve is present between
(A) left atrium and left ventricle
(B) the two atria
(C) right atrium and right ventricle
(D) the two ventricles
99. Which cells in kidneys secrete renin hormone ?
(A) Podocytes
(B) Juxtaglomerular cells
(C) Mesangial cells
(D) Squamous epithelial cells
100. Which hormone acts on distal tubules of kidney and helps in reabsorption of sodium and excretion of potassium ?
(A) Insulin
(B) Aldosterone
(C) Glucagon
(D) Vasopressin

C - SECTION - IV

COMPULSORY FOR ALL STREAMS
CHILD DEVELOPMENT, PEDAGOGY, SCHOOL MANAGEMENT
AND EVALUATION

101. In School-based management, accountability is primarily linked with :
- (A) Authority with autonomy
 - (B) Resource with authority
 - (C) Autonomy with responsibility
 - (D) Inspection with autonomy
102. Which governance approach is least consistent with school-based management ?
- (A) Shared leadership
 - (B) Participatory decision making
 - (C) Community partnership
 - (D) Bureaucratic central control
103. The most valid indicator of competency-based assessment is :
- (A) Memorisation
 - (B) Attendance
 - (C) Ranking
 - (D) Performance evidence
104. Which characteristic is essential for ensuring fairness in educational evaluation ?
- (A) Popularity
 - (B) Speed
 - (C) Completion
 - (D) Objectivity
105. Assessment for learning primarily aims at :
- (A) Certify learning
 - (B) Rank learners
 - (C) Improve learning
 - (D) Compare schools
106. For what purpose curriculum adaptation is required ?
- (A) Ignoring diversity
 - (B) Eliminating assessment
 - (C) Reducing learning
 - (D) Meeting learner needs

SET - C

107. What is the primary role of a BRCC in the educational management hierarchy ?

- (A) Developing statewide textbook
- (B) Supervising the financial audits of district schools
- (C) Conducting on-site academic support and monitoring of schools at Block level
- (D) Supporting District Education Officer in Administrative work at District level

108. Which data management system is used by the educational hierarchy in India to collect and analyse school level data from the district up to the national level ?

- (A) UDISE+ (B) SWAYAM
- (C) DIKSHA (D) PARAKH

109. The primary purpose of a School Development Plan (SDP) is :

- (A) Budget allocation for school
- (B) School improvement through planning
- (C) Staff transfer management
- (D) Examination scheduling

110. Which principle best ensures the sustainability of School Development Plan ?

- (A) One time planning
- (B) Top-down decision
- (C) Continuous monitoring and review
- (D) Annual inspection

111. Critical pedagogy opposes

- (A) Democratic learning
- (B) Dialogue
- (C) Participation
- (D) Oppression and inequality

112. Which of the following examples best reflects learning as a process rather than an outcome ?

- (A) Scoring 90% on a Mathematics test
- (B) Understanding steps while solving equations through guided practice
- (C) Completing a workbook and receiving 'A' grade
- (D) Displaying improved handwriting on an assignment

SET - C

113. A teacher notices that although students actively participate in hands-on activities, their performance in the final assessment does not reflect deep understanding. Which action would best balance learning as a process and as an outcome?

- (A) Reduce active learning and focus on memorisation
- (B) Increase the number of summative tests
- (C) Provide structured reflection and formative feedback during activities
- (D) Allow students to choose their own assessment formats

114. In a teacher-centric approach, which is the primary role of a teacher?

- (A) Facilitate learning by supporting students' inquiry
- (B) Act as the main source of knowledge and control the learning process
- (C) Allow students to discover everything independently
- (D) Provide individualized learning materials as per needs

115. Diversity is the beauty of classroom. What should not be the role of a teacher to address the diversity in class?

- (A) Using variety of TLMs
- (B) Using variety of activities
- (C) Encourage small group learning and independent learning
- (D) Divide the class on the basis of talents of students

116. Who was the exponent of three dimensional model of intelligence representing a number of factors or abilities relating to intellectual activities?

- (A) Sternberg
- (B) J. P. Guilford
- (C) L.L. Thurstone
- (D) H. Gardner

117. NEP 2020 addresses adolescent stress through :

- (A) Strict and Rigid Board Examinations
- (B) Bagless days, counselling and cultivating life skills
- (C) Longer school hours
- (D) No sports till class XII

SET - C

118. A student was previously active in class has become withdrawn and irritable over the last month. What should the teacher do first?

- (A) Reduce the student's responsibilities in class permanently
- (B) Observe and talk to the student privately to understand the cause
- (C) Call parents immediately and suggest to nurture the child carefully
- (D) Ignore, as it is a normal teenage phase

119. A child learns to ride a bicycle after many falls and fails. This shows :

- (A) Learning is only a lengthy process, not instant
- (B) Learning requires practice with reinforcement
- (C) Learning needs punishment
- (D) Learning occurs due to maturation only

120. Positive self concept develops through :

- (A) Encouragement
- (B) Constant criticism
- (C) Neglect
- (D) Fear

121. Which of the following is the best statement to define development?

- (A) Development means structural and physiological changes
- (B) Development implies changes in bodily functions
- (C) Development refers to quantification of bodily changes
- (D) Development implies periodic changes of body up to certain period

122. Who defined development as "a progressive series of changes that occur in orderly predictable pattern as a result of maturation and experience"?

- (A) Elizabeth Hurlock
- (B) J. E. Anderson
- (C) G. W. Allport
- (D) Harold Stevenson

123. The principle of developing spinal cord of the individual first and then outward development takes place is called :

- (A) Differentiation Principle
- (B) Integration Principle
- (C) Proximodistal Principle
- (D) Cephalocaudal Principle

SET - C

124. Which of the following statements is incorrect ?

- (A) Maturation is growth from within, but learning is an outward growth
- (B) Sex acts as an important determinant of growth and development
- (C) Heredity provides the base on which environment builds the personality of the individual
- (D) Growth is the only determiner of human development

125. At which stage of cognitive development, does a child develop language and begin to use symbols to represent objects ?

- (A) Sensorimotor stage
- (B) Pre-operational stage
- (C) Concrete operational stage
- (D) Formal operational stage

126. Teacher-made tests are meant for :

- (A) Board examination
- (B) School-based Assessment
- (C) Large Scale Assessment
- (D) Large Scale Survey

127. Which principle is least consistent with Assessment for Learning ?

- (A) Self-assessment
- (B) Peer-assessment
- (C) Continuous feedback
- (D) One-time high-stake testing

128. NCF-2005 emphasizes :

- (A) Learning without burden
- (B) Rote memorization
- (C) Examination orientation
- (D) Teacher domination

129. Which assessment approach is most aligned with the objectives of the National Education Policy 2020 ?

- (A) Memory-based testing
- (B) High-stake annual examination
- (C) Competency based assessment
- (D) Norm-referenced ranking

130. PARAKH initiative in India primarily aims at :

- (A) Conduct Board examination
- (B) Recruit teachers
- (C) Develop textbooks
- (D) Standardize school assessment practice

SET - C

131. Which of the following statements is not correct regarding assessment of students' achievement as per NEP 2020 ?

- (A) More emphasis on Summative Assessment
- (B) More emphasis on Formative Assessment
- (C) Focus on 360 Degree Assessment
- (D) Focus on Competency-based Assessment

132. Which of the following tools / techniques is more objective and microscopic in assessing students' performance ?

- (A) Observation
- (B) Checklist
- (C) Rating scale
- (D) Rubrics

133. Which of the following is not a dimension of a Blueprint for test construction ?

- (A) Objectives
- (B) Contents
- (C) Form of questions
- (D) Item difficulty

134. Which of the following measurement scales possesses the attributes like magnitude, equal intervals and absolute zero point ?

- (A) Nominal scale
- (B) Ordinal scale
- (C) Interval scale
- (D) Ratio scale

135. A learner identifies his/her learning gaps and plans how to improve. This illustrates which type of Assessment ?

- (A) Assessment as learning
- (B) Assessment for learning
- (C) Assessment of learning
- (D) Summative Assessment

136. Which of the following groups of TLM represents Audio-visual aids ?

- (A) Radio, Tape Recorder, TV and Flash card
- (B) Motion picture, Cinema, Puppets and Maps
- (C) Television, Smart Board, Cinema and Computer
- (D) Films, Podcast, Models and Tele-conferencing

137. In which management style of education teachers are given unrestricted freedom to make decisions regarding their pedagogical inputs and innovation ?

- (A) Bureaucratic management
- (B) Autocratic management
- (C) Laissez faire management
- (D) Democratic management

SET - C

138. Which of the following is primarily accountable for providing academic support, curriculum development and teacher training research to improve quality school education ?

- (A) NCTE (B) NCERT
(C) CBSE (D) NUEPA

139. What does context-based teaching mean ?

- (A) Ignoring students' experience
(B) Intense memorization of contents
(C) Connecting learning with learners' surroundings
(D) Teacher domination

140. Multilingual education refers to

- (A) One language principle in all stages of learning
(B) Initially learning in home language and gradually in additional language
(C) Learning multiple languages from early stage
(D) Learning in home language at all stages

141. The author of the book "Thought and Language" published in 1934 is

- (A) Lev Vygotsky
(B) Jean Piaget
(C) J. P. Guilford
(D) Noam Chomsky

142. Which of the following is the correct arrangements of hierarchical needs suggested by Maslow ?

- (A) Self-actualized needs, self-esteem needs, safety needs, physiological needs, love and belonging needs
(B) Self-esteem needs, self-actualized needs, love and belonging needs, safety needs and physiological needs
(C) Physiological needs, safety needs, love and belonging needs, self-esteem needs and self-actualized needs.
(D) Physiological needs, love and belonging needs, safety needs, self-esteem needs and self-actualized needs

SET - C

143. Critical pedagogy is most closely associated with which thinker ?

- (A) B. F. Skinner
- (B) Jean Piaget
- (C) Paulo Freire
- (D) Edward Thorndike

144. The main aim of critical pedagogy is :

- (A) Social transformation
- (B) Examination success
- (C) Maintain discipline
- (D) Punishment

145. Reflection and action together are called :

- (A) Praxis
- (B) Reinforcement
- (C) Conditioning
- (D) Evaluation

146. The Language Acquisition Device of Chomsky is best described as :

- (A) a part of the brain that stores vocabulary
- (B) a teaching method for language
- (C) an inherited mental mechanism for learning grammar
- (D) a behavioural conditioning tool

147. In which year was Stanford-Binet Intelligence Scale adopted in America ?

- (A) 1905
- (B) 1908
- (C) 1911
- (D) 1916

148. Which period of human life is called as the period of developing finer muscular co-ordination ?

- (A) Early childhood
- (B) Later childhood
- (C) Adolescence
- (D) Adulthood

149. The "Identity vs Role confusion" stage of psychosocial development occurs in which of the following stages of development ?

- (A) Adolescence
- (B) Childhood
- (C) Adulthood
- (D) Infancy

150. Which intelligence helps in understanding others ?

- (A) Linguistic
- (B) Spatial
- (C) Interpersonal
- (D) Musical