INSTRUCTIONS

1. Immediately after the commencement of the Examination, before writing the Question Booklet Version Code in the OMR sheet, you should check that this Question Booklet does NOT have any unprinted or torn or missing pages or questions etc. If so, get it replaced by a complete 'Question Booklet' of the available series.

2. Write and encode clearly the Register Number and Question Booklet Version Code A, B, C, ...... or H as the case may be, in the appropriate space provided for that purpose in the OMR Answer Sheet. Also ensure that candidate's signature and Invigilator's Signature columns are properly filled in. Please note that it is candidate's responsibility to fill in and encode these particulars and any omission/discrepancy will render the OMR Answer Sheet liable for Rejection.

3. You have to enter your Register Number in the Question Booklet in the box provided alongside. DO NOT write anything else on the Question Booklet.

4. This Question Booklet contains 100 Questions. Each Question contains four responses (answers). Select the response which you want to mark on the Answer Sheet. In case you feel that there is more than one correct response, mark the response which you consider the most appropriate. In any case, choose ONLY ONE RESPONSE for each question.

5. All the responses should be marked ONLY on the separate OMR Answer Sheet provided and ONLY in Black or Blue Ball-point Pen. See instructions in the OMR Answer Sheet.

6. All questions carry equal marks. Attempt all questions.

7. Sheets for rough work are appended in the Question Booklet at the end. You should not make any marking on any other part of the Question Booklet.

8. Immediately after the final bell indicating the conclusion of the examination, stop making any further markings in the Answer Sheet. Be seated till the Answer Sheets are collected and accounted for by the Invigilator.

9. Questions are printed both in English and Kannada. If any doubt arises in the Kannada Version, refer to the English Version of the questions. Please Note that in case of any dispute the English Version of Question Booklet is final.

10. Penalty for wrong answers:

   (i) There are four alternative for the answer to every question. For each question, of which a wrong answer has been given by the candidate, one-fourth of the marks assigned to that question will be deducted as penalty.

   (ii) If a candidate gives more than one answer to a question, it shall be treated as a wrong answer even if one of the given answers happens to be correct and there shall be same penalty as above to that question.

   (iii) If a question is left blank, i.e., no answer is given by the candidate, there shall be no penalty for that question.

Possession of Mobile Phones, Calculators and other Electronic/Communication gadgets of any kind is prohibited inside the Examination venue.
1. T, E, S, U, P, T, U

2. E, F, G, H, I, J, K

3. 385, 385, 385

4. 3, 10, 101 ...

5. 101, 101

XMP-MAS-5S2-PYP
1. Study the following figure and answer the question given below:

![Diagram]

□ → Married people
○ → People who live in joint family
△ → School teachers

By which letter, the married people who live in joint family but not are school teachers are represented?
(a) T  (b) R  (c) Q  (d) S

2. Eight friends E, F, G, H, I, J, K and L are seated around a square table – two on each side. There are 3 girls who are not seated next to each other.
- J is between L and F.
- G is between I and F.
- H, a girl is second to the left of J.
- F, a boy is seated opposite to E, a lady member.
- There is a girl between F and I. What is true about J and K?
(a) J is boy, K is girl
(b) J is girl, K is boy
(c) Both are girls
(d) Both are boys

3. 583 people can make 385 baskets in 385 days. All the people work at the same rate and all baskets require same effort. How long will one person take to prepare two such baskets?
(a) 385 days  (b) 583 days  (c) 1166 days  (d) 770 days

4. Read the following informations carefully and answer the question given below:

The sum of the income of Ramu and Shyamu is more than the sum of the income of Chandru and Deepu. The sum of the income of Ramu and Chandru is same as the sum of the income of Shyamu and Deepu. Moreover Ramu earns half as much as the sum of the income of Shyamu and Deepu.

Whose income is the highest?
(a) Ramu’s  (b) Shyamu’s  (c) Chandru’s  (d) Deepu’s

5. Look at the series 3, 10, 101.... What number should come next?
(a) 10101  (b) 10201  (c) 10202  (d) 11012
6. ನಂತರ 5 + ಪ್ರತ್ಯೇಕ ಅಧಿಕೃತ:<br><br>![Diagram]


(a) A ಹುಗುಲು B ಮತ್ತು ಮಾರಾಟಗೊಂಡಿದೆ.<br>(b) B ಹುಗುಲು E ಮತ್ತು ಮಾರಾಟಗೊಂಡಿದೆ.<br>(c) D ಹುಗುಲು E ಮತ್ತು ಮಾರಾಟಗೊಂಡಿದೆ.<br>(d) A ಹುಗುಲು D ಮತ್ತು ಮಾರಾಟಗೊಂಡಿದೆ.

XMP-MAS-5S2-PYP (4 - A)
6. Consider the following four figures.

![Figures]

Which one of the following figures fits in the fifth place?

(a) ![Figure A]

(b) ![Figure B]

(c) ![Figure C]

(d) ![Figure D]

7. Let A, B, C, D, E and F be a group of friends. There are two housewives, one professor, one doctor, one engineer and a lawyer in the group. There are only two married couples in the group. The lawyer is married to D, who is a housewife. No woman in the group is either a doctor or an engineer. C, the engineer is married to F, who is a professor. A is married to a housewife. E is not a housewife. Which one of the following is a married couple?

(a) A and B  
(b) B and E  
(c) D and E  
(d) A and D

8. As a Municipal Commissioner you are criticised for the increasing pig menace. These pigs belong to a community very close to the local MLA. It would be very difficult for you to shift the pigs, as they manage to come back. Some of the leaders also convince you that pigs solve garbage problem by consuming them. Your local lower/reporting authority resorts to shooting pigs. One such bullet pierces the legs of a kid. It results in a huge unrest. What would you do?

(a) Immediately stop shooting of the pigs and dismiss your reporting authority who ordered the shooting.

(b) Defend the reporting authority and stick to your stand and continue the shooting.

(c) Defend your reporting authority and suspend the shooting operations.

(d) Suspend all operations and keep quiet until everything subsides.
9. 常数α的值为2.0时，曲线的形状类似于一条直线。通常情况下，α的值在0到1之间。当α增加时，曲线会变得更加平滑。如果α接近0，曲线会变得更尖锐。

(a) α = 0.5；
(b) α = 1.0；
(c) α = 2.0；
(d) α = 2.5。

10. 某品牌电视的售价在2021年1月1日为10000元。2022年1月1日，该品牌电视的售价为12000元。假设每季度的售价变化率是固定的，求每季度的售价变化率。

(a) 10%；
(b) 20%；
(c) 30%；
(d) 40%。

11. 软件工程师小明在2021年6月加入公司，他的工资为10000元。2022年6月，他的工资为12000元。假设每半年的工资变化率是固定的，求每半年的工资变化率。

(a) 10%；
(b) 20%；
(c) 30%；
(d) 40%。
9. One of the commercial movies to be released has raised a lot of controversy as the theme is against the principles of a local minority religion. But the Theater owners and the Producers of the film have obtained permission for the release and viewing of the films for public. Suddenly you find a large number of local youth and persons of dubious character stoning the Theater and stopping viewers from entering the theatre. The owners are asking you, a local senior Police Officer to take charge and permit viewing. What will you do?

(a) Have a discussion with the local youth and the society leaders to stop the strike and permit viewing—but unlikely to agree.

(b) Use force to evict the local leaders and the youth and permit the viewers to view the film.

(c) Ask the Theater owners to suspend the release of the film for sake of safety of the property.

(d) Arrest all the youth and local leaders protesting and allow the viewing of the film.

10. In a crowded market place around 7.30 P.M. there is a bomb blast. Many people are feared to have been killed and/or seriously injured in the blast. You are a senior administrative officer in-charge of the district. You got the information of the blast at 7.35 P.M. You will

(a) Personally rush to the place of occurrence and start sending the dead and injured to the local hospital.

(b) Ask the police, health and civic authorities to swing into action and also sound an alarm at the major hospitals for emergency duty.

(c) Be in touch with the anti-terrorist squad of the State headquarters to provide expert help.

(d) Call a press meet to tell the press people of the incident and to request them not to publish unverified information.

11. You are the Chairman of the Selection Committee, two of your committee members of equal rank enter into an heated argument over the choice of candidate, you will

(a) Ask the two to compromise

(b) Allow the two to fight and find their own solution

(c) Not consider their view point of conflict

(d) Evaluate the pros and cons of their argument and decide
12. 300 रुपये में 8% की दर से अर्जित मूल्य 20% दर से 242 रुपये तिल्ला है। 2.40 at et 0.1); 2.40 at et 4

13. रिश्ते रजिस्टर में ढाँचे 3 रजिस्टर जूते रजिस्टर, 6% मुद्रावार्ड, संस्थान 5 रजिस्टर जूते रजिस्टर, 9% मुद्रावार्ड में, 8 रजिस्टर जूते रजिस्टर, 13% मुद्रावार्ड में रजिस्टर, तो 11 रजिस्टर संस्थान रिश्ते में 8160 रजिस्टर्स रजिस्टर रजिस्टर, जब संस्थान कितने रजिस्टर रजिस्टर है?

14. लाभ के मुख्त 100 रुपये में कितने को राशि के साथ सिर्फ़ 75 रुपये। संस्थान 3 उपर्युक्त रजिस्टरी रजिस्टर, 600 रुपये, शाब्दिक रजिस्टर में राशि निर्देश शाब्दिक समय पर राशि कितने प्रकार से राशि निर्देशित किया था?

15. रात्री राओं में सफलता नामक कोई व्यक्ति गोलजित रहता है परंतु इसके बाद 50% राशि में 30 रुपये राशि है। तो 16 मिनुट, 15 मिनट, 17 मिनट एवं 29 मिनट निर्देशित किया जा सकता है?

XMP-MAS-5S2-PYP (8 - A)
12. By selling an umbrella for ₹ 300, a shopkeeper gains 20%. During a clearance sale, the shopkeeper allows a rebate of 10% on the marked price. The percentage of the shopkeeper's gain is
(a) 7%  
(b) 7½%  
(c) 8%  
(d) 8½%

13. Natesh borrowed some money at the rate 6% p.a. for the first 3 years, 9% p.a. for the next 5 years and 13% p.a. beyond 8 years. The above are all simple interest rates. If Natesh pays a total of ₹ 8,160 after 11 years, how much money did he borrow?
(a) ₹ 8,000  
(b) ₹ 10,000  
(c) ₹ 12,000  
(d) ₹ 14,000

14. An express train travelled at an average speed of 100 km/hr, stopping for 3 minutes after every 75 km. How much time does the train take to travel between two places which are 600 km apart?
(a) 6 hrs 21 min.  
(b) 6 hrs 24 min.  
(c) 6 hrs 27 min.  
(d) 6 hrs 30 min.

15. The seed of a particular variety of a rose in a rose garden, multiplies into 2 everyday due to reproduction. If there is only one seed on the first day, it increases to two on the second day, increases to four on third day, increases to eight on fourth day and so on. If starting with one seed it takes 30 days to cover 200 square meters plot, how long will it take to cover the same plot if started with two seeds?
(a) 16 days  
(b) 15 days  
(c) 17 days  
(d) 29 days

16. On a bus route from place A to place B, if the fare is kept at ₹ x per passenger, then 50–x passengers are expected to travel. What should be the fare in order to maximize the revenue?
(a) ₹ 15  
(b) ₹ 20  
(c) ₹ 25  
(d) ₹ 30
17. A square is divided into four equal parts. One of the parts is shaded.

(a) 8  (b) 10  (c) 12  (d) 14

18. A cube is divided into 27 equal parts. One of the parts is shaded.

(a) 3.0  (b) 11.5  (c) 7  (d) 10.5

19. S and N are two points on a map. The scale of the map is 1 cm = 1 km.

(a) 14 : 19  (b) 19 : 21  (c) 17 : 21  (d) 19 : 14

20. N and P are two points on a map. The scale of the map is 1 cm = 1 km.

(a) 5601  (b) 5944  (c) 6669  (d) 8372
17. The number of triangles in the following figure is

![Diagram of triangles]

(a) 8  (b) 10  (c) 12  (d) 14

18. A cube is taken and all its six faces are painted. Then, the cube is cut by six planes, so as to yield the maximum number of smaller cubes. If 3.5 litres of paint was consumed to paint the original cube, find the additional amount of paint needed to paint all the unpainted faces of all the smaller cubes.

![Diagram of cube]

(a) 3.0 litres  (b) 11.5 litres  (c) 7 litres  (d) 10.5 litres

19. What is the ratio between the number of students studying at post-graduate and graduate level respectively from institute S?

(a) 14 : 19  (b) 19 : 21  (c) 17 : 21  (d) 19 : 14

20. Total number of students studying at post-graduate level from institute N and P is

(a) 5601  (b) 5944  (c) 6669  (d) 8372
21. ಎರಡೂ ದಿನಿಗಳಿಗೆ ಮೂನ್ಯುತ್ತುಂದನ್ನು ತೆಗೆದುಕೊಳ್ಳದು ಶಕ್ತಿಯವರ ಸುರಂಭು ಕುರಿತಿ ಕೆಲಸ ಬಾರಿ ಶುರು ನೆಲೆಯಲ್ಲಿದೆ? 
   (a) 2009 (b) 2010 
   (c) 2011 (d) 2013 

22. 2009 ವರೆಗೆ 2014 ವರೆಗೆ ಯಾವುದೇ ಸ್ವಾಮ್ಯ ವ್ಯವಹಾರವನ್ನು ಗಣಿಸಲು ವಿವಿಧ ಶಕರಾಂತಿಗಳಿಗೆ ಸುರಕ್ಷಿತ ಕೆಲಸ ನೆಲೆಯಲ್ಲಿದೆ? 
   (a) ಅರ್ಪಿತೀಯ ಸ್ವಾಮ್ಯ 
   (b) ಸಂಸ್ಥಾನ ಸ್ವಾಮ್ಯ 
   (c) ಗುರುತ್ತುಂದನ್ನು 
   (d) ಮಹಾತ್ಮಗಳಾಗಿ 

23. 2008 ವರೆಗೆ 2013 ವರೆಗೆ ಕಲೆಗಳಿಗೆ ಕೋಟೆ ಮೂರು ವರ್ಷದ ಕಾಲದ ಸೂಚಿಯು ಬೆಳೆದಿದೆ. ( ದಿನಾಂಕ 21 & 22) 
   ಶೇಕುಹಾಕಿ ಕಲೆಗಳ ವಿಲುಪ್ತಿಯು 2009 ವರೆಗೆ 2015 ವರೆಗೆ ಶೇಕುಹಾಕಿ ಕಲೆಗಳ ತೆಗೆದುಕೊಳ್ಳುವ ವಿನ್ಯಾಸದಲ್ಲಿ ಕೆಲಸ ಬಾರಿ ಶುರು ನೆಲೆಯಲ್ಲಿದೆ. 
   ದೊರೆಯುವ ಅಂಶದ ಮಾರುಕಟ್ಟೆ ಅನುಗುಣ ಅಂಕಿಸಲು ಪ್ರಕಟಿಸಲು ಸಂದರ್ಶಿಸಿದ್ದ ಸೂಚಿಗಳಲ್ಲಿ ಕೆಲಸ ಬಾರಿ ಶುರು ನೆಲೆಯಲ್ಲಿದೆ. 
   ಕೆಲಸ ಬಾರಿ ಶುರು ನೆಲೆಯಲ್ಲಿದೆ. 

24. 2008 ವರೆಗೆ 2013 ವರೆಗೆ ಕಲೆಗಳಿಗೆ ಕೋಟೆ ಮೂರು ವರ್ಷದ ಕಾಲದ ಸೂಚಿಯು ಬೆಳೆದಿದೆ. ( ದಿನಾಂಕ 21 & 22) 
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   ದೊರೆಯುವ ಅಂಶದ ಮಾರುಕಟ್ಟೆ ಅನುಗುಣ ಅಂಕಿಸಲು ಪ್ರಕಟಿಸಿದ್ದ ಸೂಚಿಗಳಲ್ಲಿ ಕೆಲಸ ಬಾರಿ ಶುರು ನೆಲೆಯಲ್ಲಿದೆ. 
   ಕೆಲಸ ಬಾರಿ ಶುರು ನೆಲೆಯಲ್ಲಿದೆ. 

25. 2008 ವರೆಗೆ 2013 ವರೆಗೆ ಕಲೆಗಳಿಗೆ ಕೋಟೆ ಮೂರು ವರ್ಷದ ಕಾಲದ ಸೂಚಿಯು ಬೆಳೆದಿದೆ. ( ದಿನಾಂಕ 21 & 22) 
   ಶೇಕುಹಾಕಿ ಕಲೆಗಳ ವಿಲುಪ್ಟಿಯು 2009 ವರೆಗೆ 2015 ವರೆಗೆ ಶೇಕುಹಾಕಿ ಕಲೆಗಳ ತೆಗೆದುಕೊಳ್ಳುವ ವಿನ್ಯಾಸದಲ್ಲಿ ಕೆಲಸ ಬಾರಿ ಶುರು ನೆಲೆಯಲ್ಲಿದೆ. 
   ದೊರೆಯುವ ಅಂಶದ ಮಾರುಕಟ್ಟೆ ಅನುಗುಣ ಅಂಕಿಸಲು ಪ್ರಕಟಿಸಿದ್ದ ಸೂಚಿಗಳಲ್ಲಿ ಕೆಲಸ ಬಾರಿ ಶುರು ನೆಲೆಯಲ್ಲಿದೆ. 
   ಕೆಲಸ ಬಾರಿ ಶುರು ನೆಲೆಯಲ್ಲಿದೆ. 

26. 2008 ವರೆಗೆ 2013 ವರೆಗೆ ಕಲೆಗಳಿಗೆ ಕೋಟೆ ಮೂರು ವರ್ಷದ ಕಾಲದ ಸೂಚಿಯು ಬೆಳೆದಿದೆ. ( ದಿನಾಂಕ 21 & 22) 
   ಶೇಕುಹಾಕಿ ಕಲೆಗಳ ವಿಲುಪ್ಟಿಯು 2009 ವರೆಗೆ 2015 ವರೆಗೆ ಶೇಕುಹಾಕಿ ಕಲೆಗಳ ತೆಗೆದುಕೊಳ್ಳುವ ವಿನ್ಯಾಸದಲ್ಲಿ ಕೆಲಸ ಬಾರಿ ಶುರು ನೆಲೆಯಲ್ಲಿದೆ. 
   ದೊರೆಯುವ ಅಂಶದ ಮಾರುಕಟ್ಟೆ ಅನುಗುಣ ಅಂಕಿಸಲು ಪ್ರಕಟಿಸಿದ್ದ ಸೂಚಿಗಳಲ್ಲಿ ಕೆಲಸ ಬಾರಿ ಶುರು ನೆಲೆಯಲ್ಲಿದೆ. 
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   ದೊರೆಯುವ ಅಂಶದ ಮಾರುಕಟ್ಟೆ ಅನುಗುಣ ಅಂಕಿಸಲು ಪ್ರಕಟಿಸಿದ್ದ ಸೂಚಿಗಳಲ್ಲಿ ಕೆಲಸ ಬಾರಿ ಶುರು ನೆಲೆಯಲ್ಲಿದೆ. 
   ಕೆಲಸ ಬಾರಿ ಶುರು ನೆಲೆಯಲ್ಲಿದೆ.
Directions: Answer the following two questions (Q. Nos. 21 & 22) from the figure given below: Department of Health and Family Welfare, Government of Karnataka has published Swine-flu epidemic situation in Karnataka from 2009 to 2015.

21. Maximum percentage of deaths due to Swine-flu epidemic among positive cases is from the year
   (a) 2009    (b) 2010
   (c) 2011    (d) 2013

22. What is the trend of the percentage of deaths due to Swine-flu epidemic from 2009 to 2014?
   (a) Non-increasing
   (b) Non-decreasing
   (c) Steady
   (d) Fluctuating

23. Male and female population of a country (in lakhs) for the period 2008 to 2013 are presented in the following graph:

   In how many of the given years, was the male population at least 10% more than the female population?
   (a) 3    (b) 2
   (c) 1    (d) 0

24. A survey was conducted to analyse the public opinion on liquor ban in a city. The opinion recorded based on a questionnaire is given in the following table:

<table>
<thead>
<tr>
<th></th>
<th>For ban</th>
<th>Against ban</th>
<th>No opinion</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>680</td>
<td>1290</td>
<td>110</td>
<td>2080</td>
</tr>
<tr>
<td>Women</td>
<td>920</td>
<td>380</td>
<td>120</td>
<td>1420</td>
</tr>
<tr>
<td>Total</td>
<td>1600</td>
<td>1670</td>
<td>230</td>
<td>3500</td>
</tr>
</tbody>
</table>

Identify the most appropriate statement.
   (a) More women are against banning liquor.
   (b) More men are against banning liquor.
   (c) More men are for banning liquor.
   (d) More than 10% men have no opinion.
25. Which of the following is not true? Write down the answer.
(a) 80-90 degree Celsius 
(b) 90-100 degree Celsius 
(c) 100-110 degree Celsius 
(d) 110-120 degree Celsius

26. Which of the following is not true? Write down the answer.
(a) 1999 
(b) 2000 
(c) 2001 
(d) 2002

27. Which of the following is not true? Write down the answer.
I. ISO 9001:2008 
II. ISO 9001:2015 
III. ISO 9001:2018 
IV. ISO 9001:2020
(a) I 
(b) II 
(c) III 
(d) IV

28. Which of the following is not true? Write down the answer.
(a) 25.00 
(b) 0.00 
(c) 0.00 
(d) 0.00

29. Which of the following is not true? Write down the answer.
(a) 25.00 
(b) 25.00 
(c) 25.00 
(d) 25.00

30. Which of the following is not true? Write down the answer.
(a) 25.00 
(b) 25.00 
(c) 25.00 
(d) 25.00

31. Which of the following is not true? Write down the answer.
(a) 25.00 
(b) 25.00 
(c) 25.00 
(d) 25.00
25. The Success of Agriculture in India depends on rainfall. 80-90 per cent of rainfall over the country occurs mostly during
(a) North-west monsoon
(b) North-east monsoon
(c) South-west monsoon
(d) South-east monsoon

26. Which of the following handloom product of Karnataka has been registered under Geographical Indication of Goods Act, 1999?
(a) Udupi Saree
(b) Melukote Panche
(c) Mysore Silk Saree
(d) Ilkal Saree

27. The Sakala Mission has
I. ISO 9001:2008 certification
II. Won many national and international awards for excellence in public service delivery.
III. The best model of citizen delivery in the country.
IV. World Bank funding and technical support.
Choose the correct answer from the codes given below:
(a) I and II
(b) II and III
(c) I, II and III
(d) II, III and IV

28. Electricity Tariff is determined by
(a) State Government
(b) Central Electricity Authority
(c) Karnataka Electricity Regulatory Commission (KERC)
(d) Karnataka Power Transmission Corporation Limited (KPTCL)

29. National Institute of Wind Energy is established in which city?
(a) New Delhi (b) Chennai (c) Calcutta (d) Bengaluru

30. Under Ksheerabhagya Programme milk is provided to school children ___ days in a week.
(a) 6 (b) 3 (c) 5 (d) 4

31. What is the present Investment Limit in Plant & Machinery to determine ‘Small Scale Manufacturing Enterprise’?
(a) Above ₹ 25.00 lakhs upto ₹ 200.00 lakhs
(b) Above ₹ 25.00 lakhs upto ₹ 300.00 lakhs
(c) Above ₹ 25.00 lakhs upto ₹ 400.00 lakhs
(d) Above ₹ 25.00 lakhs upto ₹ 500.00 lakhs
32. The marks distribution for the examination is as follows:

(a) 35 marks for General Knowledge, English, Kannada, History, Geography
(b) 45 marks for General Knowledge, English, Kannada, History, Geography
(c) 40 marks for General Knowledge, English, Kannada, History, Geography
(d) 40 marks for General Knowledge, English, Kannada, History, Geography

33. If the distribution of marks is 40% for English and 60% for History, what would be the total marks obtained?

(a) 70 marks
(b) 90 marks
(c) 80 marks
(d) 60 marks

34. The questions in the examination are as follows:

(a) 200 marks
(b) 300 marks
(c) 400 marks
(d) 500 marks

35. The students are required to

(a) Read the question
(b) Write the answer
(c) Write the answer
(d) Write the answer

36. The questions are as follows:

(a) 40% English, 60% History
(b) 60% English, 40% History
(c) 60% English, 40% History
(d) 40% English, 60% History

XMP-MAS-5S2-PYP (16 - A)
32. “Manaswini” programme of Karnataka Government is to provide,

(a) Pension ₹ 500 per month to more than 35 years old unmarried and divorcee women of BPL.

(b) Pension ₹ 600 per month to more than 45 years old unmarried and divorcee women of BPL.

(c) Pension ₹ 500 per month to more than 40 years old unmarried and divorcee women of BPL.

(d) Pension ₹ 800 per month to more than 40 years old unmarried and divorcee women of BPL.

33. Which of the below mentioned are the dual purpose breeds of cattle (Milch and draught purpose) in Karnataka?

(a) Amrithmahal and Hallikar

(b) Killar and Malenadu Gidda

(c) Devani and Krishna valley

(d) Sahiwal and Kankrej

34. The Deputy Chairman of Karnataka State Planning Board is

(a) C.M. Ibrahim

(b) T.B. Jayachandra

(c) Prof. Dr. Mumtaz Ali Khan

(d) D.H. Shankar Moorthy

35. While travelling on Highway, if the kilometre stone is marked (painted) with white and semicircular top portion of km stone is marked with brilliant green colour, then this Highway must be

(a) State Highway

(b) National Highway

(c) Express way

(d) Major District Road

36. The MGNREGA guidelines mandates maintenance of minimum ratio of wage to material expenditure by each of implementing agencies as,

(a) 40% wage expenditure : 60% material expenditure in one year for all works.

(b) 60% wage expenditure : 40% material expenditure in one year for all works.

(c) 60% wage expenditure : 40% material expenditure for every work.

(d) 40% wage expenditure : 60% material expenditure for every work.
37. निम्नलिखित व्यक्ति कोणाचे वर्ग करणे अत्यंत मान्य आहे (Ministry) —
(संवर्धन शोधनीय संस्था)
(राज्य सरकार)
(सामाजिक संस्था)
(लोक रत्न)

(a) अभिनव शुभधारी
(b) अति सुरक्षित
(c) महिला संस्था
(d) महत्त्वपूर्ण

38. "इंग्रजी शीत" तत्त्व का एक नवकरिता अंगांक निषेधित किंवा, आकर्षित?
(a) हिंदुधारिता
(b) मूलधारिता
(c) मुगमधारिता
(d) मार्गस्रोतमधारिता

39. निम्नलिखित सन्दर्भात लोकांनी मान्य करणे अत्यंत मान्य आहे (संस्थापक संविधान):
(संवर्धन शोधनीय संस्था)
(राज्य सरकार)
(सामाजिक संस्था)
(लोक रत्न)

(a) संवदना अंकन कार्य संगीत
(b) कृतित संवदना कार्य संगीत
(c) ताजातिमा कार्य संगीत
(d) ध्वनि अंकन कार्य संगीत

40. निम्नलिखित वर्ग कोणाचा प्रमुख संवर्धन, सामाजिक संदर्भातील विविध संस्थाने अत्यंत मान्य करणे अत्यंत मान्य आहे (Ministry) —
(संवर्धन शोधनीय संस्था)
(राज्य सरकार)
(सामाजिक संस्था)
(लोक रत्न)

(a) 800
(b) 1500
(c) 500
(d) 2500

41. यदि ज्योति निर्माण लक्ष्य Hriday (अनुपम पत्र लक्ष्य संस्था)
(राज्य सरकार)
(सामाजिक संस्था)
(लोक रत्न)

(a) आकर्षित
d) हिंदुधारिता
(c) मूलधारिता
(d) मुगमधारिता

42. निम्नलिखित संस्थानी संवर्धनीय विविध संस्थाने अत्यंत मान्य करणे अत्यंत मान्य आहे, 1976 रोज़ संस्थानीय विविध संस्थाने निम्नलिखित अंक कलेक्टर अनुपम पत्र लक्ष्य संस्था?
(a) 5 अंक
(b) 1 अंक
(c) 2½ अंक
(d) 3 अंक

43. निम्नलिखित वर्ग मधूरता तत्त्वातील विविध संस्थाने अनुपम पत्र लक्ष्य संस्था निम्नलिखित अंकांतर:?
(a) अंक 27
(b) अंक 25
(c) अंक 23
(d) अंक 29
37. The Ministry of Environment, Forests and Climate change provides financial assistance to Eco-clubs to promote environmental awareness and educate school children under the programme
(a) National Mission for a Green India
(b) National Eco-club Programme
(c) National Green Peace Programme
(d) National Green Corps.

38. “Dr. Salim Ali” is a well known
   (a) Ornithologist
   (b) Biologist
   (c) Environmentalist
   (d) Dermatologist

39. Which of the following scheme/programme of the Karnataka State Government seeks to promote tree planting by public or farmer by providing seedlings at subsidised rate to the people?
   (a) Samrudha Hasiru Grama Yojne
   (b) Krishi Aranya Protsaha Yojne
   (c) Devadeva Vana Yojane
   (d) Vana Bhagya Yojane

40. As per the report of the High Level Working Group (HLWG) on Western Ghats headed by Dr. K. Kasturirangan, approximately how many villages of Karnataka were included as part of Eco-sensitive Area (ESA)?
   (a) 800  (b) 1500
   (c) 500  (d) 2500

41. Which of the below mentioned town is selected under HRIDAY (Heritage City Development & Augmentation Yojana) scheme in Karnataka?
   (a) Hampi  (b) Bijapur
   (c) Bidar  (d) Badami

42. What is the tenure of Mayor and Deputy Mayor of a Corporation as per Karnataka Municipal Corporation Act, 1976?
   (a) 5 years  (b) 1 year
   (c) 2½ years  (d) 3 years

43. The total numbers of National Parks and Sanctuaries in Karnataka are
   (a) 5 and 27 respectively
   (b) 6 and 25 respectively
   (c) 4 and 23 respectively
   (d) 6 and 29 respectively
44. '2ao. 

(a) 3 वीं काल्पना (Tertiary) वर्गातील जागृतीत 

(b) प्राथमिक 

(c) मध्यम (Mid) 

(d) राष्ट्रीय (National)

45. भूगोलात्मक क्षेत्रातल कौनसा क्षेत्र 

(a) मानसिक (Intellectual) 

(b) आयुर्वेदिक (Ayurvedic) 

(c) मानवता (Human) 

(d) तत्त्वज्ञान (Scientific) 

46. इमोशनल स्वास्थ्यचे किती प्रकारे होतो? 

(a) 10 

(b) 12 

(c) 8 

(d) 14

47. मूलभूत संदर्भ (मूलभूत संदर्भ मध्ये 

(a) 2011 

(b) 2012 

(c) 2013 

(d) 2014

48. वांवर विद्युत नैवेद्याची पूर्व 

(a) प्रेमपूर 

(b) आबादी 

(c) संपूर्ण 

(d) राष्ट्रीय

49. विविध विभागातले किती वेळा 

(1) मासाच्या 

(2) वर्षाच्या 

(3) दिवशी 

(4) तासाच्या 

50. भूगोलात्मक "नैवेद्य नैवेद्य किती 

(a) आपल्याच्या 

(b) आपल्याच्या 

(c) आपल्याच्या 

(d) आपल्याच्या 

51. वांवर विद्युत नैवेद्याची पूर्व 

(1) आपल्याच्या 

(2) आपल्याच्या 

(3) आपल्याच्या 

(4) आपल्याच्या 

XMP-MAS-5S2-PYP
44. 'Bala Sanjivini' is a programme meant to provide
   (a) Tertiary level Medicare for anganwadi children in selected hospitals across the State.
   (b) Health care for school going children across the State.
   (c) Medical insurance scheme for all the children across the State.
   (d) None of the above.

45. ______, a web based application of the Survey Settlement & Land Records Department, is used to issue the pre mutation (11E) sketches to the citizens (as mandated by the Karnataka Land Revenue Act).
   (a) Bhoomi
   (b) Nadakacheri
   (c) UPOR
   (d) Mojani

46. How many seats are there in Rajya Sabha (Council of States) for Karnataka State?
   (a) 10  (b) 12
   (c) 8    (d) 14

47. As per Plastic Wastes (Management & Handling) Rules, 2011 manufacturing of plastic bags less than ______ thickness is banned.
   (a) 25 microns
   (b) 30 microns
   (c) 35 microns
   (d) 40 microns

48. Movement of nutrients in the eco-system is always
   (a) Cyclic     (b) Linear
   (c) Parallel   (d) Horizontal

49. Inverted Pyramid of Numbers and Biomass, are found in
   (a) Parasitic food-chain and forest eco-system respectively.
   (b) Grassland Ecosystem and forest eco-system respectively.
   (c) Parasitic food-chain and Pond eco-system respectively.
   (d) Pond eco system and forest eco-system respectively.

50. In India the area declared as a 'Biodiversity hot spot' is
    (a) Himalayas
    (b) Aravalli Ranges
    (c) Vindya - Satpuras
    (d) Nallamala Ranges

51. In a food chain which of the following is considered as a primary producer?
    (a) Heterotrophs
    (b) Autotrophs
    (c) Plants
    (d) Predators

XMP-MAS-5S2-PYP (21 - A)
52. If you have a list of numbers and you need to sort them in ascending order, you would typically use an algorithm. Which algorithm would you use to sort these numbers?
(a) Binary Search
(b) Merge Sort
(c) Quick Sort
(d) Bubble Sort

53. What is the output of the following code?
```
53. 2.igt7, itTOTIDV
tecpli 7,Lal
left to 71ebT,Q.JZTID4Ct.
```
(a) 2
(b) 7
(c) 7
(d) 2

54. What is the context of Ex Situ in the context of the given question?
(a) storage
(b) migration
(c) conservation
(d) preservation

55. If you are asked to make a list of birds, which of the following would be included?
(a) Sparrow
(b) Eagle
(c) Jay
(d) Owl

56. Which of the following would be the most appropriate option to choose?
(a) Order
(b) Species
(c) Genus
(d) Family

57. If you are asked to describe the size and shape of a bird, which of the following would be the most appropriate option to choose?
(a) Plumage
(b) Bill
(c) Body
(d) Tail
52. Suitable impurities are added to a semiconductor depending on its use. This is done in order to
(a) increase its life
(b) enable it to withstand higher voltages
(c) increase its electrical conductivity
(d) increase its electrical resistivity

53. Rain is falling vertically downwards. To a man running eastwards, the rain will appear to be coming from
(a) east
(b) west
(c) north-east
(d) south-east

54. Which of the following is an example of 'ex situ' conservation?
(a) Wild Life Sanctuary
(b) Seed Bank
(c) Sacred Grooves
(d) National Park

55. The India-based Neutrino Observatory (INO), a world-class underground laboratory for neutrino research is coming up at
(a) Pottipuram in Tamil Nadu
(b) Rajkot, Gujarat
(c) Dibrugarh, Assam
(d) Jaitapur, Maharashtra

56. Which of the following planets was demoted from its planetary status in our solar system?
(a) Uranus  (b) Pluto
(c) Neptune  (d) Venus

57. On a clean glass plate a drop of water spreads to form a thin layer whereas a drop of mercury remains almost spherical because
(a) Cohesive force for water is greater than adhesive force with glass.
(b) Cohesive force for mercury is greater than adhesive force with glass.
(c) Density of mercury is greater than water.
(d) Adhesive force for mercury is greater than cohesive force with glass.
58. ಮಾಡಿ ಸಹಿಷ್ಠ ನಿರ್ಮಾಣವಿಷ್ಯ ಮುಖ್ಯವಾಗಿ ಹೊಂದಿದ್ದಾರೆ ವಿಶೇಷವಾಗಿ ಶೀಲಿತ ಕಮ್‌ಸಾರ. ಲೇಖನವು ಗಳಿಸಿದರೆ,
1. ಮೂಲಸಾಲು ಹೊಂದಿದ್ದಾರೆ
2. ಸಮಯದ ಹೊಂದಿದ್ದಾರೆ
3. ಕ್ರಮವಾಗಿ ಹೊಂದಿದ್ದಾರೆ
4. ಬಿಡಿಕಿರುವ ನಂತರವಿಷ್ಯ ಮಾಡಿದರೆ
ಇದು ಈಗಿನೆಡು ಮುಖ್ಯವಾಗಿ ಬಂದು ಹೊಂದಿದ್ದಾರೆ.
(a) 1 ಮಾಡಿ 4
(b) 1 ಮಾಡಿ 2
(c) 1 ಮಾಡಿ 3
(d) 2 ಮಾಡಿ 3

59. ನಮೂನೆ ನೇರ ಮುಂದುಮುದ್ಯಾದ ನಂತರದಲ್ಲಿ ಹೊಂದಿದ್ದಾರೆ ವಿಶೇಷವಾಗಿ ಕಂಡು ಮಾಡಿದ ಲೇಖನದ ಮುಖ್ಯವಾಗಿ ಬಂದು ಹೊಂದಿದ್ದಾರೆ?
(a) ಸಾಮಾನ್ಯವಾಗಿ ಬೇಡಲಿಲ್ಲಿ
(b) ಸಾಮಾನ್ಯವಾಗಿ ಕೊನೆಯಲ್ಲಿ ಮುಂದುಮದ್ಯಾ
(c) ಸಾಮಾನ್ಯವಾಗಿ ಕೊನೆಯಲ್ಲಿ ಹೊಂದಿದ್ದಾರೆ
(d) ಸಾಮಾನ್ಯವಾಗಿ ಬೇಡಲಿಲ್ಲಿ ಮುಂದುಮದ್ಯಾ

60. ಪ್ರತಿಯೊಂದು ಸ್ಥಳದಲ್ಲಿ ಸೂಕ್ಷ್ಮಗೊಳಿಸಿದ ಸಂಶಯಗಳು ಪ್ರತಿಯೊಂದು ಸೂಕ್ಷ್ಮಗೊಳಿಸಿದ ಸಂಶಯಗಳು ಮತ್ತು ಸೂಕ್ಷ್ಮಗೊಳಿಸಿದ ಸಂಶಯಗಳು ಹಾಗೂ ಸೂಕ್ಷ್ಮಗೊಳಿಸಿದ ಸಂಶಯಗಳು.
(a) ಪ್ರತಿಯೊಂದು ಸ್ಥಳದಲ್ಲಿ ಸೂಕ್ಷ್ಮಗೊಳಿಸಿದ ಸಂಶಯಗಳು ಪ್ರತಿಯೊಂದು ಸೂಕ್ಷ್ಮಗೊಳಿಸಿದ ಸಂಶಯಗಳು ಹಾಗೂ ಸೂಕ್ಷ್ಮಗೊಳಿಸಿದ ಸಂಶಯಗಳು
(b) ಸಂಶಯ ಸ್ಥಳದಲ್ಲಿ ಸೂಕ್ಷ್ಮಗೊಳಿಸಿದ ಸಂಶಯಗಳು ಪ್ರತಿಯೊಂದು ಸೂಕ್ಷ್ಮಗೊಳಿಸಿದ ಸಂಶಯಗಳು
(c) ಸಂಶಯ ಸ್ಥಳದಲ್ಲಿ ಸೂಕ್ಷ್ಮಗೊಳಿಸಿದ ಸಂಶಯಗಳು ಪ್ರತಿಯೊಂದು ಸೂಕ್ಷ್ಮಗೊಳಿಸಿದ ಸಂಶಯಗಳು
(d) ಸಂಶಯ ಸ್ಥಳದಲ್ಲಿ ಸೂಕ್ಷ್ಮಗೊಳಿಸಿದ ಸಂಶಯಗಳು ಪ್ರತಿಯೊಂದು ಸೂಕ್ಷ್ಮಗೊಳಿಸಿದ ಸಂಶಯಗಳು

61. ಸ್ಥಳೀಯ ಲೋಕರಂಗಳು AC ಮೂಲಸಾಲುವಿನಂತೆ ಪ್ರತಿ ಸಂದರ್ಭದಲ್ಲಿ ಪ್ರತಿಯೊಂದು ಸೂಕ್ಷ್ಮಗೊಳಿಸಿದ ಸಂಶಯಗಳು (ಆಧಾರದ ಸೂಕ್ಷ್ಮಗೊಳಿಸಿದ) ಎಂದು (ಉಳ್ಳುಸುವರೆ) ಎಂದು ಪ್ರತಿಯೊಂದು ಸೂಕ್ಷ್ಮಗೊಳಿಸಿದ ಸಂಶಯಗಳು.
(a) ಸ್ಥಳೀಯ ಲೋಕರಂಗಳು AC ಮೂಲಸಾಲು AC ಮೂಲಸಾಲು DC ಮೂಲಸಾಲು AC ಮೂಲಸಾಲು
(b) ಪ್ರತಿಯೊಂದು ಸೂಕ್ಷ್ಮಗೊಳಿಸಿದ ಸಂಶಯಗಳು ಪದ್ಧತಿಗಳು
(c) ಸ್ಥಳೀಯ ಲೋಕರಂಗಳು ಸೂಕ್ಷ್ಮಗೊಳಿಸಿದ ಸಂಶಯಗಳು (ಆಧಾರದ) ಎಂದು ಪ್ರತಿಯೊಂದು ಸೂಕ್ಷ್ಮಗೊಳಿಸಿದ ಸಂಶಯಗಳು
(d) ಸ್ಥಳೀಯ ಲೋಕರಂಗಳು ಸೂಕ್ಷ್ಮಗೊಳಿಸಿದ ಸಂಶಯಗಳು (ಆಧಾರದ) ಎಂದು ಪ್ರತಿಯೊಂದು ಸೂಕ್ಷ್ಮಗೊಳಿಸಿದ ಸಂಶಯಗಳು
58. Consider the motion of the tip of the minute hand of a clock.
In one hour
1. The displacement is zero
2. The distance covered is zero
3. The average speed is zero
4. The average velocity is zero
Select the correct answer using the codes given below:
(a) 1 and 4
(b) 1 and 2
(c) 1 and 3
(d) 2 and 3

59. If the earth is at one fourth of its present distance from the sun, the duration of the year will be
(a) half of the present year
(b) one-eighth of the present year
(c) one-fourth of the present year
(d) one-sixth of the present year

60. The weight of a person on earth is less at equator than at the poles. This is because
(a) equatorial region is hotter than polar region.
(b) the earth is flattened at poles and bulged at equator.
(c) the earth's surface at poles is covered by ice.
(d) the moon going round the earth exerts a less force on a person at equator than at poles.

61. In our homes, a tester glows when it touches the live terminal of AC mains but does not glow when it touches neutral terminal. The reason for this is
(a) current is always converted from AC to DC when it is supplied.
(b) the live wire is a conductor but the neutral wire is not a conductor.
(c) the neutral terminal is at the same voltage as the ground.
(d) current flows only through live wire never through the neutral wire.
62. 胞淋巴细胞表面的糖蛋白在免疫调节中起着重要作用。  
(a) IgE  
(b) IgM  
(c) IgA  
(d) IgG  

63. 下列氨基酸中，哪种在蛋白质合成中起关键作用？  
(a) 酪氨酸  
(b) 色氨酸  
(c) 赖氨酸  
(d) 精氨酸  

64. 下列维生素中，哪种是脂溶性维生素？  
(a) 维生素A  
(b) 维生素C  
(c) 维生素D  
(d) 维生素E  

65. 下列哪种细菌可能会引起肺炎？  
(a) 结核分枝杆菌  
(b) 肺炎链球菌  
(c) 金黄色葡萄球菌  
(d) 大肠杆菌  

66. 在下列化合物中，哪一种是有机化合物？  
(a) 甘氨酸  
(b) 丙氨酸  
(c) 乙酸  
(d) 乙醇  

XMP-MAS-5S2-PYP  (26 - A)
62. The gas used for artificial ripening of fruits is
   (a) methane  
   (b) ethane  
   (c) ethylene  
   (d) acetylene

63. The reason to keep us awake and sometimes sleepy even when we are not tired, is due to a hormone called
   (a) Adrenaline  
   (b) Adenosine  
   (c) Thyroxine  
   (d) Serotonin

64. Mass number of an atom is equal to
   (a) number of electrons  
   (b) number of neutrons  
   (c) sum of the number of protons and neutrons  
   (d) sum of the number of protons and electrons

65. In some parts of the world, during severe winter, the surface of the lakes are frozen leaving water below. The freezing at the bottom is prevented because
   (a) the conductivity of ice is low.  
   (b) the water has large latent heat of fusion.  
   (c) the water has large specific heat.  
   (d) the temperature of the earth at the bottom of the lake is high.

66. There are many different regions to the electromagnetic spectrum. These include
   A. visible light
   B. gamma-rays
   C. infra-red
   D. micro-waves
   E. radio-waves
   F. ultra-violet, and
   G. X-rays.
   Put them in order of increasing wavelength, starting with the shortest wavelength first.
   (a) GBDAFCE  
   (b) BGFADCE  
   (c) GBAFCDE  
   (d) BGFACDE
67. In the context of any scientific research, which of the following plays a significant role in the experimental design?

(a) UN (Protocol) / 2008
(b) 2008
(c) UN
(d) 2008

XMP-MAS-5S2-PYP (28 - A)

68. Choose the correct answer for the following question:

(a) 1, 2, 3, 4
(b) 1, 2, 3, 4
(c) 1, 2, 3, 4
(d) 1, 2, 3, 4

69. In the context of any scientific study, which of the following is the correct sequence?

(a) 1, 2, 3, 4
(b) 1, 2, 3, 4
(c) 1, 2, 3, 4
(d) 1, 2, 3, 4
67. Consider the following International Environment Conventions/Protocols/Conferences with their major themes:

1. The UN Climate Change Conference held in Poland in Dec. 2008 discussed Development and transfer of Technologies, financial mechanism, reducing emissions from deforestation and forest degradation and Disaster Management.

2. The Basel Convention in 1989 was on the Control of Transboundary movement of Hazardous wastes and their disposal.

3. Montreal Protocol adopted in 1987 referred to the specific measures to be taken on substances that deplete the Ozone layer.


Which of the above statements is/are correct?
(a) 1 only
(b) 2 and 3 only
(c) 1, 2 and 3 only
(d) 1, 2, 3 and 4

68. Biosphere Reserves have been established to conserve biodiversity and genetic integrity of plants, animals and microorganisms. Consider the following pairs:

<table>
<thead>
<tr>
<th>Biosphere Reserve</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Dehang- Dabang</td>
<td>Arunachal Pradesh</td>
</tr>
<tr>
<td>2. Manas</td>
<td>Assam</td>
</tr>
<tr>
<td>3. Simlipal</td>
<td>Jharkhand</td>
</tr>
<tr>
<td>4. Agasthya- malai</td>
<td>Karnataka</td>
</tr>
</tbody>
</table>

Which of the above pairs are correctly matched?
(a) 1 and 2 only
(b) 1, 2 and 3 only
(c) 1, 2 and 4 only
(d) 1, 2, 3 and 4

69. Consider the following plant cell organelles and their specific functions.

<table>
<thead>
<tr>
<th>Organelle</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloroplast</td>
<td>Photosynthesis</td>
</tr>
<tr>
<td>Mitochondria</td>
<td>Respiration</td>
</tr>
<tr>
<td>Nucleus</td>
<td>Secretion</td>
</tr>
<tr>
<td>Ribosomes</td>
<td>Protein synthesis</td>
</tr>
</tbody>
</table>

Which of the above pairs is/are matched correctly?
(a) 2 only
(b) 1 and 3 only
(c) 1, 2 and 4 only
(d) 1, 2, 3 and 4
70. The enzymes of the following genera are involved in the oxidation of sulfur compounds.

(a) Pyrolobus fumarii
(b) Sulfobolus thurbers
(c) Methanopyrus Kandiers
(d) Thermus thermophilus

73. Which of the following are the oxygen requirements?

(a) Pyrolobus fumarii
(b) Sulfobolus thurbers
(c) Methanopyrus Kandiers
(d) Thermus thermophilus

74. In the detoxification of sulfur compounds, the following genera are involved. Which of the following are the oxygen requirements?

(a) 25%
(b) 50%
(c) 75%
(d) 0%

75. Which of the following are the oxygen requirements?

(a) Pyrolobus fumarii
(b) Sulfobolus thurbers
(c) Methanopyrus Kandiers
(d) Thermus thermophilus

76. Which of the following are the oxygen requirements?

(a) Pyrolobus fumarii
(b) Sulfobolus thurbers
(c) Methanopyrus Kandiers
(d) Thermus thermophilus

77. Which of the following are the oxygen requirements?

(i) Pyrolobus fumarii
(ii) Sulfobolus thurbers
(iii) Methanopyrus Kandiers
(iv) Thermus thermophilus

(a) (i) (ii) (iii) (iv)
(b) (i) (ii) (iii) (iv)
(c) (i) (ii) (iii) (iv)
(d) (i) (ii) (iii) (iv)
70. Consider following propagules:
1. Rhizome of ginger
2. Tuber of sweet potato
3. Bulb of onion
4. Sucker of banana
Which of the above is/are modification of root?
(a) 1 and 2 only
(b) 2 only
(c) 1 and 3 only
(d) 1, 3 and 4 only

71. Genetically modified organisms are developed in modern biotechnology using which of the following techniques?
1. Insertion of genes from other organisms.
2. Removal of part of the genes.
4. Silencing of some gene/genes.
Select the correct answer by choosing the codes given below:
(a) 2, 3 and 4
(b) 1, 2 and 4
(c) 1, 3 and 4
(d) 1, 2 and 3

72. Venkataram Ramakrishnan and his co-worker got the Nobel Prize in 2009. Their investigation was on the structural characterization of Ribosomes and they used the experimental organism viz.
(a) Pyrolobus fumarii
(b) Sulfolobus thurbers
(c) Methanopyrus Kandiers
(d) Thermus thermophilus

73. Dinosaurs were present during
(a) Paleozoic era
(b) Cenozoic era
(c) Mesozoic era
(d) Proterozoic era

74. A husband and wife have normal vision but father of both of them were colour-blind. Probability of their first daughter to be colour-blind is
(a) 25%  (b) 50%
(c) 75%  (d) 0%

75. Mosquito transmits the following except
(a) Malaria
(b) Leishmaniasis
(c) Dengue
(d) Chikungunya

76. CARTOSAT-1 & 2, RISAT-1 & 3 and SARAL are
(a) Student Satellites
(b) Communication Satellites
(c) Navigation Satellites
(d) Earth observation Satellites

77. Consider the following pairs regarding National symbols of India:
(i) National animal – Royal Bengal Tiger
(ii) National heritage animal – Langur of India
(iii) National mammal of India
(iv) National bird – Peacock
Which of the above pairs are correct?
(a) (i) and (ii)
(b) (iii) and (iv)
(c) (i) and (iii)
(d) (i) and (iv)
78. The vibration of a spring-mass system is given by
\[ x(t) = A e^{-\alpha t} \cos(\omega t + \phi) \]
where \( A \), \( \alpha \), and \( \omega \) are constants and \( \phi \) is the phase angle. If the vibration is damped, what is the rate of decay?
(a) \( A e^{-\alpha t} \)
(b) \( A e^{-\alpha t} \cos(\omega t + \phi) \)
(c) \( A e^{-\alpha t} \sin(\omega t + \phi) \)
(d) \( A e^{-\alpha t} \tan(\omega t + \phi) \)

79. A mass-spring system is described by the equation of motion
\[ m \ddot{x} + c \dot{x} + kx = F(t) \]
where \( m \), \( c \), and \( k \) are constants and \( F(t) \) is an external force. Which of the following represents the natural frequency of the system?
(a) \( \sqrt{\frac{k}{m}} \)
(b) \( \sqrt{\frac{c}{m}} \)
(c) \( \sqrt{\frac{k}{c}} \)
(d) \( \sqrt{\frac{m}{c}} \)

80. A capacitor is connected to a battery with a voltage of 12 V. The capacitance of the capacitor is 10 \( \mu \)F. What is the charge on the capacitor?
(a) 1 \( \mu \)C
(b) 10 \( \mu \)C
(c) 100 \( \mu \)C
(d) 1000 \( \mu \)C

81. A series circuit consists of a resistor, an inductor, and a capacitor. The voltage across the components are 10 V, 5 V, and 3 V, respectively. Which of the following represents the total voltage in the circuit?
(a) 18 V
(b) 15 V
(c) 12 V
(d) 9 V
78. The 4th generation (4G) mobile telecommunication service, using TD-LTE technology, was started for the first time in India in:
(a) Kolkata (b) Chennai (c) New-Delhi (d) Mumbai

79. In India, hydro power projects are classified according to their capacity to produce the power. Then choose the correct answer.
(a) micro hydro power project : upto 300 kW
    mini hydro power project : 301 to 3000 kW
    small hydro power project : 3001 to 30000 kW
(b) micro hydro power project : upto 200 kW
    mini hydro power project : 201 to 1000 kW
    small hydro power project : 1001 to 5000 kW
(c) micro hydro power project : upto 500 kW
    mini hydro power project : 501 to 5000 kW
    small hydro power project : 5001 to 30000 kW
(d) micro hydro power project : upto 100 kW
    mini hydro power project : 101 to 2000 kW
    small hydro power project : 2001 to 25000 kW

80. With respect to Karnataka Co-operative Milk Producers Federation Limited consider the following:
1. Bengaluru Urban and Rural Milk Producers District Co-operative Societies Union has the distinction of having highest procurement and highest sale of milk by any dairy in Karnataka.
2. KMF is the second largest dairy co-operative amongst the dairy cooperatives in the country.
3. It has 13 Milk Unions.
Which of the following statements is/are true?
(a) 1, 2 and 3 (b) 1 only (c) 2 only (d) 3 only

81. Match the major agricultural revolutions in India:
A. Golden 1. Fish revolution production
B. Grey 2. Oil seed revolution production
C. Blue 3. Prawn revolution production
D. Yellow 4. Potato revolution production
E. Pink 5. Fruit revolution production
F. Round 6. Fertilizer revolution production
Select the correct answer using the codes given below:
A B C D E F
(a) 3 4 2 5 1 6
(b) 5 6 1 2 3 4
(c) 4 3 2 1 6 5
(d) 5 6 3 4 2 1
82. The range of the usual range of intelligence test (IQ) is:
(a) 90-110 (b) 50-60 (c) 75-95 (d) 120-150

83. Which is the IMR (Infant Mortality Rate) range?
(a) 38 (b) 49 (c) 56 (d) 28

84. Which is the range of the usual range of intelligence test (IQ) is:
(a) 90-110 (b) 50-60 (c) 75-95 (d) ... 

85. Which is the range of the usual range of intelligence test (IQ) is:
(a) 90-110 (b) 50-60 (c) 75-95 (d) ...

86. Which is the range of the usual range of intelligence test (IQ) is:
(a) H1N1 (b) H5N1 (c) H7N1 (d) H9N1

87. Which is the range of the usual range of intelligence test (IQ) is:
(a) H1N1 (b) H5N1 (c) H7N1 (d) H9N1

88. Which is the range of the usual range of intelligence test (IQ) is:
(a) H1N1 (b) H5N1 (c) H7N1 (d) H9N1

89. Which is the range of the usual range of intelligence test (IQ) is:
(a) H1N1 (b) H5N1 (c) H7N1 (d) H9N1

XMP-MAS-5S2-PYP (34-A)
82. Average IQ of normal person is
(a) 90-110 (b) 50-60
(c) 75-95 (d) 120-150

83. Infant Mortality Rate (IMR) of Karnataka is
(a) 38 (b) 49
(c) 56 (d) 28

84. Consider the following statements in relation to coffee production in Karnataka:
1. Karnataka is the major coffee producing State of India.
2. Important coffee producing districts of Karnataka are Tumkur, Davangere and Shimoga.
Which of the above statements is/are correct?
(a) Only 1 (b) Only 2 (c) Both 1 & 2 (d) Neither 1 nor 2

85. Name the Surgeon, who performed the first neonatal heart surgery in the country on a 9-day-old baby, a successful operation in medical history.
(a) Dr. Anandkumar (b) Dr. Deviprasad Shetty (c) Dr. Desai (d) Dr. Bhat. K.S.S.

86. ‘Bird Flue’ is caused by influenza virus type
(a) H1N1 (b) H5N1 (c) H7N1 (d) H9N1

87. In north Karnataka region, to get rid of recurring scarcity of water, which of the following irrigation project is built to help a large number of farmers?
(a) Tubachi-babaleshwar lift irrigation
(b) Koyna dam irrigation
(c) Upper Krishna project
(d) Bhima river irrigation project

88. Some of these helicopters were in Feb. 2015 Air show of Bengaluru. Match List – I (Helicopter Model) with List – II (Country/make) and find the correct answer from the codes given below:

<table>
<thead>
<tr>
<th>List – I</th>
<th>List – II</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Seaking MK41</td>
<td>1. Russia</td>
</tr>
<tr>
<td>B. KA-226. T.</td>
<td>2. India</td>
</tr>
<tr>
<td>C. AS 565 MB Panther</td>
<td>3. France</td>
</tr>
<tr>
<td>D. SA 321 Super Frieon</td>
<td>4. USA</td>
</tr>
</tbody>
</table>

(a) 5 2 3 1 (b) 5 1 4 3 (c) 3 4 5 1 (d) 2 4 5 3

89. Kannada and Culture Department has bestowed ‘Kumara Vyasa’ award 2013 to
(a) Bala Chandra Shastri Hirematt (b) Matapathi (c) Ramalinge Gowda (d) Shivashankarappa

XMP-MAS-5S2-PYP (35 - A)
90. समग्रता आयुर्वेद नर्मदंदकात्रयं 
नं दीप्तिबोध नंदन करण्यं रक्षितं 
मनंतनं नर्मदंदकात्रयं नं दीप्तिबोध मनंतनं।

(a) भद्रसाधन
(b) आचारयसाधन
(c) वेदाणीयसाधन
(d) तृप्तिकारसाधन

91. तांत्रिक तंत्रिक अमुकं नर्मदंदकात्रयं 
अमुकं स्वामंत्र अकमलं रक्षितं?

(a) भद्रसाधन
(b) आचारयसाधन
(c) वेदाणीयसाधन
(d) तृप्तिकारसाधन

92. नर्मदंदकात्रयं 
अमुकं स्वामंत्र अकमलं कस्मानं?

(a) नर्मदंदकात्रयं
(b) आचारयसाधन
(c) वेदाणीयसाधन
(d) तृप्तिकारसाधन

XMP-MAS-5S2-PYP (36 - A)
90. President Pranab Mukharji during the Republic Day parade in New Delhi presented _______ to widow of Mukund Vardarajan.
   (a) Ashok Chakra
   (b) Parama Veer Chakra
   (c) Kirti Chakra
   (d) Shaurya Chakra

91. Byalalu in Ramanagaram District was recently in the news for what?
   (a) Optical telescope station
   (b) Mangalyan tracking station
   (c) Jet propulsion station
   (d) DRDO missile station

92. Navarasapura Utsav is closely associated with
   (a) Music
   (b) Holy celebration
   (c) Farmers festival
   (d) Fishermen

93. Match the following:

<table>
<thead>
<tr>
<th>Set – I</th>
<th>Set – II</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Natural Active Immunity</td>
<td>1. Anti-rabies serum</td>
</tr>
<tr>
<td>B. Natural Passive Immunity</td>
<td>2. Acquired after small pox infection</td>
</tr>
<tr>
<td>C. Artificial Active Immunity</td>
<td>3. Transferred from mother to child</td>
</tr>
<tr>
<td>D. Artificial Passive Immunity</td>
<td>4. Develops due to vaccination</td>
</tr>
</tbody>
</table>

   Correct match is:
   (a) 2 1 4 3
   (b) 2 3 4 1
   (c) 3 4 2 1
   (d) 4 3 2 1

94. Which of the following is/are true about the Prithivi II missile?

1. It is a part of the IGMDP of India.
2. Its naval variant is called as Dhanush
3. It has a range of 5000 km

Select correct answer:
(a) Only 1
(b) Only 2
(c) 1 & 2
(d) 1, 2 & 3
95. ಮಾಡಿದ್ದರೀರು ಸೀರಿಸುತ್ತಿರುವ ಎಂದರೆ ಮಾನವರ ಸುತ್ತಕೆ ಎಂದರೆ?

(a) ಚಿತ್ರದಲ್ಲಿ ಸಾಮಾನ್ಯವಾಗಿ ಮೂಲದಲ್ಲಿ ವಸ್ತುಪಾಲನಕ್ಕೆ ಮತ್ತು ಕುಕ್ಕಾರ ಮಾಡಿದೆ.

(b) ವಸ್ತುಪಾಲನಕ್ಕೆ ಮೂಲದಲ್ಲಿ ಪರಿಚಯಿಸುವಿಕೆಯು ಮಾಡಿದೆ.

(c) ವಸ್ತುಪಾಲನಕ್ಕೆ ಪರಿಚಯಿಸುವಿಕೆಯು ಏಳು ಮಾಡಿದೆ.

(d) ಮೂಲದಲ್ಲಿ ಮಾಡಿದ್ದರೆ ಸೀರಿಸುತ್ತಿರುವ ಎಂದರೆ.
Passage – 1

What I admired was the moral and ethical side of our movement and of Satyagraha. I did not give an absolute allegiance to the doctrine of non-violence or accept it forever, but it attracted me more and more, and the belief grew upon me that, situated as we were in India and with our background and traditions, it was the right policy for us. The spiritualization of politics, using the word no in its narrow religious sense, seemed to me a fine idea. A worthy end should have worthy means leading up to it. That seemed not only a good ethical doctrine but sound, practical politics, for the means that are not good often defeat the end in view and raise new problems and difficulties. And then it seemed so unbecoming, so degrading to the self-respect of an individual or a nation to submit to such means, to go through the mire. How can one escape being sullied by it? How can we march ahead swiftly and with dignity if we stoop or crawl?

95. What is the ultimate authorial view in the passage?

(a) The moral and ethical side of Satyagraha appeals to the author.

(b) The spiritualization of politics seemed to be a fine idea.

(c) The non-co-operation movement offered to the author what he wanted.

(d) A worthy end should have worthy means.
96. ಎಂದರೆ ಲಂಬವಿಧಿ ಮಾರ್ಗವಾಹಿಸುವ ಪ್ರಯತ್ನ ಅಥವಾ ಪ್ರಯತ್ನ ನಿದ್ದೇಶಗಳು ཉಂಟು? ಎನ್ನುವ ಸಮಯದಲ್ಲಿ, ನಂತರ
(a) ಅಭಿಪ್ರಾಯ ವಿಧಿಯವಲೇ ಹೊರತಾಗಿ ಉಂಟು.
(b) ಪ್ರಯತ್ನ ಪ್ರತ್ಯೇಕ ಪ್ರಯತ್ನ ಪ್ರಭೇದದಲ್ಲಿ ಮತ್ತು ಉಣ್ಣೆ ಮೂಲಕ
(c) ಚಟುವಟಿಕೆಯಿಂದ ಪ್ರಯತ್ನ ಪ್ರಭೇದದಲ್ಲಿ ಮತ್ತು ಉಣ್ಣೆ ಮೂಲಕ
(d) ಪ್ರಯತ್ನ ಪ್ರತ್ಯೇಕ ಪ್ರಯತ್ನ ಪ್ರಭೇದದಲ್ಲಿ ಮತ್ತು ಉಣ್ಣೆ ಮೂಲಕ

97. ಎಂದರೆ ಲಂಬವಿಧಿ ಮಾರ್ಗವಾಹಿಸುವ ಪ್ರಯತ್ನ ನಿದ್ದೇಶಗಳು ಉಂಟು? 
(a) ಎಂದರೆ ಪ್ರತ್ಯೇಕ ಪ್ರಯತ್ನ ನಿದ್ದೇಶಗಳು ಉಂಟು.
(b) ಎಂದರೆ ಪ್ರತ್ಯೇಕ ಪ್ರಯತ್ನ ನಿದ್ದೇಶಗಳು ಉಂಟು.
(c) ಎಂದರೆ ಪ್ರತ್ಯೇಕ ಪ್ರಯತ್ನ ನಿದ್ದೇಶಗಳು ಉಂಟು.
(d) ಎಂದರೆ ಪ್ರತ್ಯೇಕ ಪ್ರಯತ್ನ ನಿದ್ದೇಶಗಳು ಉಂಟು.
96. Why did Bhagavad Gita appeal to the author as suggested by the passage? It appealed because,
(a) the author liked the verses of the Bhagavad Gita.
(b) the author himself was not calm and detached.
(c) the author liked the saying of Bhagavad Gita not caring for the result.
(d) the author liked the verses recited every evening in Gandhiji's Ashram prayers.

Passage – 2

Somewhere in the arrangement of this world there seems to be a great concern about giving us delight, which shows that, in the universe, over and above the meaning of matter and forces, there is a message conveyed through the magic touch of personality. This touch cannot be analysed, it can only be felt. We cannot prove it anymore than the man from the other planet could prove to the satisfaction of his fellows the personality which remained invisible, but which, through the machinery, spoke direct to the heart. Is it merely because the rose is round and pink that it gives me more satisfaction than the gold which could buy me the necessities of life? One may, at the outset, deny the truth that a rose gives more delight than a piece of gold. But such an objector must remember that I am not speaking of artificial values. If we had to cross a desert whose sand was made of gold, then the cruel glitter of these dead particles would become a terror for us, and the sight of a rose would bring to us the music of paradise. The final meaning of the delight which we find in a rose can never be in the roundness of its petals, just as a final meaning of the joy of music cannot be in a gramophone disc. Somehow we feel that through a rose the language of love reached our hearts. Do we not carry a rose to our beloved because in it is already embodied a message which, unlike our language of words, cannot be analysed? Through this gift of a rose, we utilize a universal language of joy for own purpose of expression.

97. What does the passage propose?
(a) Delight is manifested in the round petals of the rose.
(b) The magic touch of the personality can be analysed.
(c) Expression of delight is beyond external manifestation.
(d) A gramophone disc gives the final joy of music.
98. Which of the following statements is true?

1. The monument built by the people for the nation is a monument for the nation.
2. The monument built by the people for the nation is not a monument for the nation.
3. The monument built by the people for the nation is always a monument for the nation.
4. The monument built by the people for the nation is sometimes not a monument for the nation.

Options:
(a) 3, 1 and 4 (b) 2, 1 and 3 (c) 2, 3 and 4 (d) 1, 2 and 4

Suggested Answer:
(c) 2, 3 and 4

Note: The question seems to be asking about the characteristics of a monument built by the people for the nation, and option (c) includes the characteristic that the monument is sometimes not a monument for the nation, which aligns with the variability in how monuments can be perceived or used.
98. What does the author state in the passage?
1. Speaks for artificial values in the world.
2. Machinery is used to convey the message directly to the heart.
3. Universal language of joy is expressed through a rose.
4. Meaning of delight is embodied in a message.

Choose the correct answer:
(a) 3, 1 and 4 (b) 2, 1 and 3 (c) 2, 3 and 4 (d) 1, 2 and 4

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Passage 3

Justice, it has been argued, should not only be done, it must also be 'seen to be done'. Or, more explicitly (as Lord Hewart put it in his famous judgement in 1923), justice 'should manifestly and undoubtedly be seen to be done'. It is useful to think of this requirement of justice when assessing the pros and cons of globalization in general, and the particular role of interdependence in making globalization a success. There are good reasons to argue that economic globalization is an excellent overall goal and that it is making a very positive contribution in the contemporary world. At the same time, it is hard to deny that there is some difficulty in persuading a great many people-making them 'see'-that globalization is a manifest blessing for all, including the poorest. The existence of this confrontation does not make globalization a bad goal, but it requires us to examine the reasons for which there is difficulty in making everyone see that globalization is 'manifestly and undoubtedly' good.

The critical assessment of globalization has to go hand in hand with trying to understand why so many critics, who are not moved just by contrariness or obduracy, find it hard to accept that globalization is a great boon for the deprived people of the world. If many people, especially in the less prosperous countries in the world, have genuine difficulty in seeing that globalization is in their interest, then there is something seriously challenging in that non-meeting of minds. The underlying challenge involves the role of public reasoning and the need for what John Rawls, the Philosopher, calls 'a public framework of public thought'.
99. ಎರಡು ವಿಷಯಗಳು ವಿನಿಮಯಗೊಳ್ಳುವ ರೀತಿಯಲ್ಲಿ ಭಾಗವಾಗುತ್ತವೆ. ಇವುಗಳು ಮತ್ತು ಪರೀಕ್ಷಣೆಗಳು ಮತ್ತು ಪ್ರಕ್ರಿಯೆಗಳನ್ನು ಸಾಮಾನ್ಯವಾಗಿ ವಿನಿಮಯಗೊಳ್ಳುತ್ತವೆ. ಅಂದರೆ, ಒಂದು ವಿಷಯದ ಪರೀಕ್ಷಣೆಯನ್ನು ಮತ್ತೊಂದು ವಿಷಯದ ಪರೀಕ್ಷಣೆಯಿಂದ ಹೊರಗೆ ಹೊರಗೆ ಪರೀಕ್ಷಣೆಯನ್ನು ಸಾಮಾನ್ಯವಾಗಿ ವಿನಿಮಯಗೊಳ್ಳುತ್ತವೆ.

   (a) ದತ್ತರೆ (b) ದತ್ತರೆ (c) ದತ್ತರೆ (d) ದತ್ತರೆ

100. ಎರಡು ವಿಷಯಗಳು ವಿನಿಮಯಗೊಳ್ಳುವ ರೀತಿಯಲ್ಲಿ ಭಾಗವಾಗುತ್ತವೆ. ಇವುಗಳು ಮತ್ತು ಪರೀಕ್ಷಣೆಗಳು ಮತ್ತು ಪ್ರಕ್ರಿಯೆಗಳನ್ನು ಸಾಮಾನ್ಯವಾಗಿ ವಿನಿಮಯಗೊಳ್ಳುತ್ತವೆ. ಅಂದರೆ, ಒಂದು ವಿಷಯದ ಪರೀಕ್ಷಣೆಯನ್ನು ಮತ್ತೊಂದು ವಿಷಯದ ಪರೀಕ್ಷಣೆಯಿಂದ ಹೊರಗೆ ಹೊರಗೆ ಪರೀಕ್ಷಣೆಯನ್ನು ಸಾಮಾನ್ಯವಾಗಿ ವಿನಿಮಯಗೊಳ್ಳುತ್ತವೆ.

   (a) ದತ್ತರೆ (b) ದತ್ತರೆ (c) ದತ್ತರೆ (d) ದತ್ತರೆ

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which provides ‘an account of agreement in judgement among reasonable agents.’ Rawls’ own analysis of critical assessment was largely confined to issues of justice within a country, but it can be extended to global arguments as well, and certainly has to be so extended if we are trying to assess the ends, and also the ways and means, of appropriate globalization. The goal of globalization cannot be concerned only with commodity relations, while shunning the relations of minds.

When, a year ago, the General Assembly of the United Nations requested the Secretary-General to prepare a report on ‘globalization and interdependence’ to ‘forge greater coherence’, they were opening the door not only to conventional questions of ways and means, but also to questions that deal with the transparency of assessments and the discernability of benefits. We have to ask, in particular, how global economic relations may be assessed in a way that the consequent understanding can be widely shared.

99. The winning argument/s for globalization would be
1. It is good for all nations.
2. It is an excellent overall goal.
3. It is a blessing for all including the poorest.
4. It is a positive contribution to the contemporary world.
Choose:
(a) 1 only  (b) 2 and 4
(c) 3 only  (d) 4 only

100. The idea of globalization has not won wide acclaim because,
1. There has been no proper public framework of thought or critical reasoning.
2. People think that it will adversely affect the less prosperous countries.
3. Nobody considers globalization as a boon to the deprived people of the world.
4. There are too many stubborn critics.
Which of the above statement/s is/are best supported by the passage?
(a) 1 only  (b) 2 and 3
(c) 3 only  (d) 3 and 4
Note: English version of the instructions is printed on the front cover of this booklet.