MODEL QUESTION PAPER

CLASS : X^{TH}

H.P.. BOARD OF SCHOOL EDUCATION, DHARAMSHALA

समय : 3 घंटे   पूर्णांक : 100

नोट :–   1.   सभी प्रश्न अनिवार्य हैं।
          2.   प्रश्न एक से दस तक 3–3 अंक वाले, 11 से 20 तक 4–4 अंक वाले तथा 21 से
                 25 तक 6–6 अंक वाले हैं।

1.   निम्नलिखित समीकरण निकाय को हल कीजिए।
       $4x + 7y = 20$
       $21x – 13y = 21$

2.   a और b के मान ज्ञात कीजिए यदि बहुपदों
             $p(x) = (x –1) (x^2 + 3x + a)$
       और $q(x) = (x+2) (x^2 + 2x + b)$ का HCF $(x–1) (x+2)$ हो।

3.   p का वह मान ज्ञात कीजिए जिसके लिए निम्न द्विघात समीकरण के मूल वास्तविक हों :
       $4x^2 + 8x – p = 0$

4.   निम्नलिखित सारणी में एक राज्य के विभिन्न वर्गों के श्रमिकों के प्रतिशत दिए गए हैं। इन आंकड़ों
       को एक पाई चार्ट के रूप में प्रस्तुत कीजिए।

श्रमिकों का वर्ग	%
किसान	40
खेतिहर श्रमिक	25
औद्योगिक श्रमिक	12.5
वाणिज्यिक श्रमिक	10
अन्य	12.5

5.   निम्नलिखित बारंबारता बंटन में वर्ग अंतराल (40–50) की बारंबारता अज्ञात है। यह ज्ञात है कि
       बंटन का माध्य 52 है। अज्ञात बारंबारता ज्ञात कीजिए।

वर्ग अंतराल	10–20	20–30	30–40	40–50	50–60	60–70	70–80
बारंबारता	5	3	4	–	2	6	13

6.   किसी पासे को एक बार फैंका जाता है। निम्नलिखित की प्राप्ति की प्रायिकता ज्ञात कीजिए :
       (i)   सम संख्या
       (ii)   3 से बड़ी संख्या
       (iii) 3 और 6 के बीच की संख्या

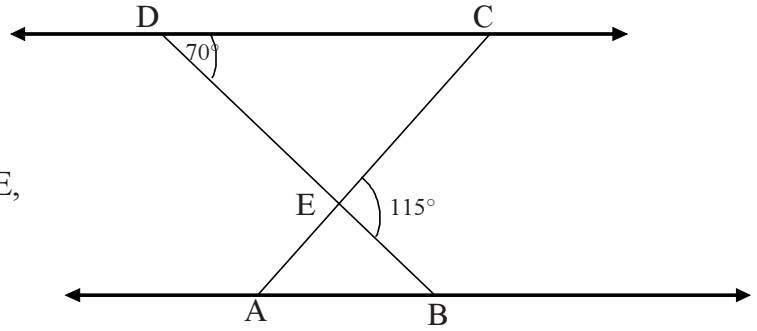7. निम्नलिखित बारंबारता बंटन के लिए वर्षों में माध्य आयु ज्ञात कीजिए :

आयु का वर्ग अन्तराल	बारंबारता
15—19	3
20—24	13
25—29	21
30—34	15
35—39	5
40—44	4
45—49	2
योग	63

8. निम्नलिखित व्यंजक को निम्नतम दों के परिमेय व्यंजक के रूप में व्यक्त कीजिए —

$$\frac{x^2 + 2x - 24}{x^2 - x - 12} \div \frac{x^2 - x - 6}{x^2 - 9}$$

9. एक त्रिभुज ABC की रचना कीजिए जिसमें AC = 6 स.म.; ∠B=30° तथा शीर्षलम्ब BD = 5 स.म. हो।

10. आकृति में ΔEDC ~ ΔEBA
∠BEC = 115° और
∠EDC = 70° है। ∠DEC, ∠DCE,
∠EAB, ∠AEB और ∠EBA
ज्ञात कीजिए।

11. समीकरण निकाय
$$5x - y - 7 = 0$$
और $x - y + 1 = 0$ को आलेखीय विधि से हल कीजिए।
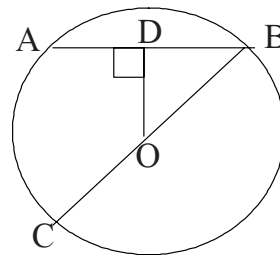
12. 3 + 11 + 19 + ...+ 803 का योगफल ज्ञात कीजिए।

13. राजेन्दर कौर का मासिक वेतन 15400 रु है। वह प्रति मास 1000 रु0 भविष्य निधि में और जीवन बीमा के 1000 रु0 वाले त्रैमासिक प्रीमियम देती है। वह 3100 रु0 आयुर्विज्ञान अनुसंधान केन्द्र में दान के रूप में देकर उस पर 100% की कटौती प्राप्त करती है। उसे कितना आयकर देना पड़ा?

14. एक टेलीविजन सैट 24000 रु0 नकद मूल्य तथा 8000 रु0 तत्काल नकद भुगतान तथा 2800 रु0 प्रतिमास की छः समान किस्तों पर खरीदा जा सकता है। किस्त योजना में लिए गए ब्याज की दर परिकलित कीजिए।

15. एक व्यक्ति चक्रवृद्धि ब्याज पर कुछ ऋण लेता है और इसे तीन समान वार्षिक किस्तों में लौटा देता है। यदि ब्याज की दर 15% वार्षिक तथा वार्षिक किस्त 486680 रु0 की हो, तो ऋण की राशि ज्ञात कीजिए।

16. आकृति में OD किसी वृत जिसका केन्द्र O है, की जीवा AB का लम्ब समद्विभाजक है। यदि BC एक व्यास हो, तो सिद्ध कीजिए कि CA=2OD है।

17. $\dfrac{1+\cos A}{\sin A} + \dfrac{\sin A}{1+\cos A} = \dfrac{2}{\sin A}$

सर्वसमिका को सिद्ध कीजिए।

18. 5 स.म. व्यास वाला एक गोला, पानी से आंशिक भरे एक बेलनाकार बर्तन में डाला जाता है। बर्तन के आधार का व्यास 10 स.म. है। यदि गोला पूर्णतया पानी में डूबा हो, तो पानी का स्तर कितना उपर उठेगा ?

19. यदि बिन्दुओं (3, K) तथा (K, 5) से बिन्दु (O, 2) की दूरियाँ बराबर हों तो K का मान ज्ञात कीजिए।

20. त्रिभुज के केन्द्रक के निर्देशांक (1,3) हैं तथा त्रिभुज के दो शीर्ष (–7, 6) तथा (8, 5) हैं। त्रिभुज का तीसरा शीर्ष ज्ञात कीजिए।

21. सारस पक्षियों में से एक चौथाई कमल के पौधों के आसपास घूम रहे हैं। कुल संख्या का $\dfrac{1}{9}$ तथा उसी संख्या का $\dfrac{1}{4}$ एवं उसी संख्या के वर्गमूल के सात गुने मिलकर पहाड़ी पर घूम रहे हैं। शेष 56 पक्षी बकुल वृक्षों पर बैठे हैं। पक्षियों की कुल संख्या कितनी है।

या

लम्बाई को 5 मात्रक घटाने और चौड़ाई को तीन मात्रक बढ़ाने से एक आयत का क्षेत्रफल 9 वर्ग मात्रक कम हो जाता है। परन्तु यदि लम्बाई को तीन मात्रक और चौड़ाई को दो मात्रक बढ़ाया गया होता, तो उसका क्षेत्रफल 67 वर्ग मात्रक बढ़ गया होता। आयत की लम्बाई और चौड़ाई ज्ञात कीजिए।

22. समकोण त्रिभुज में कर्ण का वर्ग अन्य दो भुजाओं के वर्गों के योग के बराबर होता है, सिद्ध करो।

23. यदि एक रेखा एक वृत को स्पर्श करती है तथा स्पर्श बिन्दु से एक जीवा खींची जाती है, तो वे कोण, जो यह जीवा दी गई रेखा से बनाती है, क्रमशः संगत, एकांतर वृतखंडों में बने कोणों के बराबर होते हैं।

24. 5 मी. ऊंची एक मीनार की चोटी पर एक ध्वज दण्ड लगा हुआ है। भूमि पर स्थित किसी बिन्दु से ध्वज दण्ड के ऊपरी सिरे का उनयन कोण 60° है और इसी बिन्दु से मीनार की चोटी का उनयन कोण 45° है। ध्वज दण्ड की लम्बाई ज्ञात कीजिए।

25. यदि 45 स.म. ऊंची एक बाल्टी के सिरों की त्रिज्याएं 28 स.म. और 7 स.म. हों, तो उसकी धारिता और पृष्ठीय क्षेत्रफल ज्ञात कीजिए।

Model Question Paper
Class - X
English

Time Allowed : 3 hours   M.Marks : 100

[Section A - Reading (20 Marks)]

Q1. Read the passage given below and answer the questions that follow :-

Most of the people who appear most often in history books are great conquerors and generals. Strangely enough people who really helped civilization forward are often never mentioned at all.

We do not know who made the first boat or calculated the length of the year but we know all about our killers and destroyers. We raise statues to them simply because they fought bravely. But even animals fight. So do savages. To fight is not to be civilised. Moreover, there are other way of setting quarrels among men of nations. So really civilized people have been those who have bought peace and happiness to mankind. They have been prophets, saints, doctors, inventors and discoverers. They have been truly great since instead of inflicting pain and hardship upon huminity, they have healed their wounds. Instead of killing, they have saved human lives. They are really civilized and deserved our admiration and respect.

(i)   Answer the following questions briefly :
    a)   Who are the people who generally appear in history books?
    b)   Is fighting a mark of civilization?
    c)   Why do we raise statues?
    d)   Who are truly civilized ?
    e)   Why do they deserve our admiration and respect?

(ii) Find from the passage words / phrases which mean the same as the following:
    a)   To build up
    b)   To elevate in social life
    c)   Fierce   (5+3 = 8 marks)

1

Q2. Read the passage given below and answer the questions that follow:

Books are by far the most lasting products of human efforts. Temples crumble into ruin, pictures and statues decay, but books survive. Time is of no account with great thoughts which are as fresh today as when they first passed through their authors minds ages ago. What was then thought and said still speaks to us as ever from the printed page. The only effect of time has been to sift and winnow out the bad product; for nothing in literature can long survive but what is really good. Books introduce us into the best society; they bring us into the presence of the greatest minds they have lived. We hear what they said; we see them as if they were really alive; we sympathise with them, enjoy with them, grieve with them ; there experience becomes our; as we feel as if we were actors with them in the scence which they describe:-

a) How are books the most lasting products of human efforts?
b) How does time effect a book?
c) What do books contain?
d) 'Books introduce us into the best society' Explain in your own words.
e) How can we share the experience of the greatest minds?   [6 marks]

Q3. Read the passage given below and answer the questions that follow:-
Gandhiji's greatest strength was his belief in God. He fought for the freedom of India because he used to say that the best way to serve God was to serve his people, and therefore, when he worked for the happiness of Indians, he was also making God happy. Many times people would put a straight question to him asking him to give proof that there is a God and how we can know. Gandhiji would admit frankly that he could not show God to any one , because his presence could be felt in heart only. He was, however, a lover of God and could not live with out him. He once said," If you do not give air and water, I can still live, but if you take away my brief in God, I shall die immediately.

a) What was Gandhiji's strength ?
b) How did he want to serve the God ?
c) What were Gandhiji's views about God ?
d) In what way was he a lover of God?   [6 marks]

[Section B- Writing (20marks)]

Q4. Write a letter to your brother advising him to improve his health.

                    or

Write a letter to the editor of a newspaper, against the rising prices.

[6 marks]

Q5. The beauty of the country was always delightful to me. Even as I strolled about, bird's nestling, the freshness of early morning, the sun coming up the sky filling it with lovely colours and with heavenly cheerfulness, the bright dew drops hanging on every bush, and scattered glittering over the young grass, the sweet odour of leaves and flowers; the roses and jasmines coming out in their own time filled me with speechless joy. The aspect of dark woods and water, the tall trees with their deep sighing sound, the cries and appearances of all sorts of birds and little wild animal; these were the things that kindled my imagination; and led me often many miles from home. But when I got into the peak. I could not sleep for joy and wonder. Such mighty towering rocks covered with hanging thickets and wood! Such clear swift rivers rushing along beneath them! Such wild high hills and far-stretching uplands! Such mighty ranges, as it appeared to me, of dark forests! I was never tried of gazing on them.

(i) On the basis of your reading of the above passage, make notes on it in points only, using headings and sub headings. Also use recognizable abbreviations, where necessary. Supply a suitable title on it.

(ii) Write a summary of the above passage in about 50 words.

[4+4=8 marks]

Q6. Write a paragraph in about 80 words on any one of the following topics:
a) Population Explosion
b) How I celebrated My Birthday
c) The festival I like most   [6 marks]

[Section C- Grammar (15 marks)]

Q7. (a) Use the proper Non-Finite Form of the given verb in each sentences-
    (i) The rice will grow well in the (come) season.
    (ii) The farmer is going (plough) his field.   [2 marks]

(b) Change the voice-
  (i) It is good to help the poor.
  (ii) You should have reminded your officer.   [2 marks]
(c) Combine the following pairs of sentences, using the sentences connectors given in the brackets:
  (i) She will see the picture. She will be happy. (When)
  (ii) I trust him. He is honest. (Because)   [2 marks]
(d) Fill in the blanks, using suitable modals:
  must / can / should / may
  (i) _____ you solve this sum?
  (ii) _____ God bless you!
  (iii) If you _____ see him, give him my regards.
  (iv) You _____ help Ram. After all he is your brother. [2 marks]
(e) Change the narration:-
  (i) She will say to me," I am un well".
  (ii) The players said," Hurrah! We have won the match".   [2 marks]
(f) Rearrange the following jumbled words into meaningful sentences:-
  (i) reap sow you as so you shall.
  (ii) bad a work man tools with his quarrels.   [2 marks]
(g) Do as directed:-
  (i) They are not wasting your time. (Change into Past Indefinite Tense)
  (ii) What a lovely flower! (Change into Assertive Sentence)
  (iii) Ram does not tell a lie. (Change into Future Indefinite Tense)
                                                              [3 marks]

[Section D - Literature (45 marks)]

Q8. (i) Read the extract given below and answer the questions that follow :-

The accident had occurred at midnight, while Sudha and her mother were on their way to Chennai from the pilgrimage- centre of Vayalur. Their bus collided head-on with another bus that crashed into the drivers seat killing him. Sudha was sitting two rows behind the driver with her legs out stretched on the opposite seat. As a result, her feet got jammed. She was extricated from the debris with great difficulty as her right leg was fully trapped.

(a) When did the accident occur?
(b) Was Sudha alone?

(c) How did the accident take place?

(d) Where was she coming from?

(e) Where had Sudha been sitting in the bus?   [5 marks]

(ii) Read the extract given below and answer the questions that follow:-

He changed himself into a working man and went to work with the poor peasant. The first year he advised the peasant to saw corn in a low lying damp place. The peasant took his advice and sowed there. The year happened to be a very dry one, and the crops of the other peasants were all burnt up by the sun, but the poor peasant's corn grew thick and tall and heavy with grain. Not only had he enough grain to last him for the whole year, but he had also much to spare.

(a) Who does 'He' in these lines refer to?

(b) What did he advise the peasant to do?

(c) How were the crops of other peasants burnt up?

(d) How did the poor peasant come to have a very good crop?

(e) Which word in the passage means 'slightly wet' ?   [5 marks]

Q9. What are the desired results of working together? Have they been achieved?

or

What is the "Old African Wisdom" Kofi Annan has recalled here? How is it relevant today?   [6 marks]

Q10. Give a brief sketch of Udgam Kund.

or

How do you know that Anne was close to her grandmother?   [4 marks]

Q11. Read the stanza given below and answer the questions that follow:

The sun in heaven was shining gay,

All things were joyful on that day;

The sea-birds screamed as they wheeled round,

And there was joyance in their sound.

(i) What Kind of weather was it?

(ii) How did all things look?

(iii) What were the sea-birds doing?

or

Teach me to listen, Lord
To those nearest me
My family, my friends, my co-workers
Help me to be aware that
No matter what words I hear
The message is,
"Accept the person I am. Listen to me".

(i)   Who is the poet asking for help?

(ii) What message does the poet refer to?

(iii) Who is the poet addressing? What does he ask for in this stanza?

[3 marks]

Q12. Why is the spring described as " a new comer"?

                              or

What do you think the wind is doing when the poet tells the child to listen?

[3 marks]

Q13. Answer any two of the following questions in one or two sentences each:

(a)   What kind of a garment are the weavers weaving at the fall of night and for whome?

(b)   Why does the poet say nothing will never die?

(c)   Where was the Inchcape bell? Who had put it there?   [2+2=4 marks]

Q14. Describe the 'party Scene' between tricki and Mrs. Pumphrey's household.

                    or

What job did the narrator get after graduation? Did he like his work?

[7 marks]

Q15. Answer any two of the following questions in one or two sentences each?

(a)   Who was in Ausable's room? What was in his hand?

(b)   How did the thief realise that Anil knew that it had been stolen?

(c)   When do tigers attack? In this context, how are human beings different from tigers?   [2+2 = 4 marks]

Q16. Answer any two of the following questions in one or two sentences each.

(a)   What happened when Griffin didn't wake up in time?

(b)   Why did Horace Danby rob every year? Was he a typical thief? If so, why?

(c)   Why was Laszlo sent to Ranki Street? What did he find there?

[2+2 = 4 marks]